



TERM 1

2019-2020

PRIMARY 2 DISCOVER



FOREWORD

This is a pivotal time in the history of the Ministry of Education and Technical Education (MOETE) in Egypt. We are embarking on the transformation of Egypt's K-12 education system starting in September 2018 with KG1, KG2 and Primary 1 continuing to be rolled out year after year until 2030. We are transforming the way in which students learn to prepare Egypt's youth to succeed in a future world that we cannot entirely imagine.

MOETE is very proud to present this new series of textbooks, Discover, with the accompanying digital learning materials that captures its vision of the transformation journey. This is the result of much consultation, much thought and a lot of work. We have drawn on the best expertise and experience from national and international organizations and education professionals to support us in translating our vision into an innovative national curriculum framework and exciting and inspiring print and digital learning materials.

The MOETE extends its deep appreciation to its own "Center for Curriculum and Instructional Materials Development" (CCIMD) and specifically, the CCIMD Director and her amazing team. MOETE is also very grateful to the minister's senior advisors and to our partners including "Discovery Education," "Nahdet Masr," "Longman Egypt," UNICEF, UNESCO, and WB, who, collectively, supported the development of Egypt's national curriculum framework. I also thank the Egyptian Faculty of Education professors who participated in reviewing the national curriculum framework. Finally, I thank each and every MOETE administrator in all MOETE sectors as well as the MOETE subject counselors who participated in the process.

This transformation of Egypt's education system would not have been possible without the significant support of Egypt's current president, His Excellency President Abdel Fattah el-Sisi. Overhauling the education system is part of the president's vision of 'rebuilding the Egyptian citizen' and it is closely coordinated with the ministries of higher education & scientific research, Culture, and Youth & Sports. Education 2.0 is only a part in a bigger national effort to propel Egypt to the ranks of developing countries and to ensure a great future to all of its citizens.

WORDS FROM THE MINISTER OF EDUCATION & TECHNICAL EDUCATION

It is my great pleasure to celebrate this extraordinary moment in the history of Egypt where we launch a new education system designed to prepare a new Egyptian citizen proud of his Egyptian, Arab and African roots - a new citizen who is innovative, a critical thinker, able to understand and accept differences, competent in knowledge and life skills, able to learn for life and able to compete globally.

Egypt chose to invest in its new generations through building a transformative and modern education system consistent with international quality benchmarks. The new education system is designed to help our children and grandchildren enjoy a better future and to propel Egypt to the ranks of advanced countries in the near future.

The fulfillment of the Egyptian dream of transformation is indeed a joint responsibility among all of us; governmental institutions, parents, civil society, private sector and media. Here, I would like to acknowledge the critical role of our beloved teachers who are the role models for our children and who are the cornerstone of the intended transformation.

I ask everyone of us to join hands towards this noble goal of transforming Egypt through education in order to restore Egyptian excellence, leadership and great civilization.

My warmest regards to our children who will begin this journey and my deepest respect and gratitude to our great teachers.

Dr. Tarek Galal Shawki
Minister of Education & Technical Education

NAME: _____

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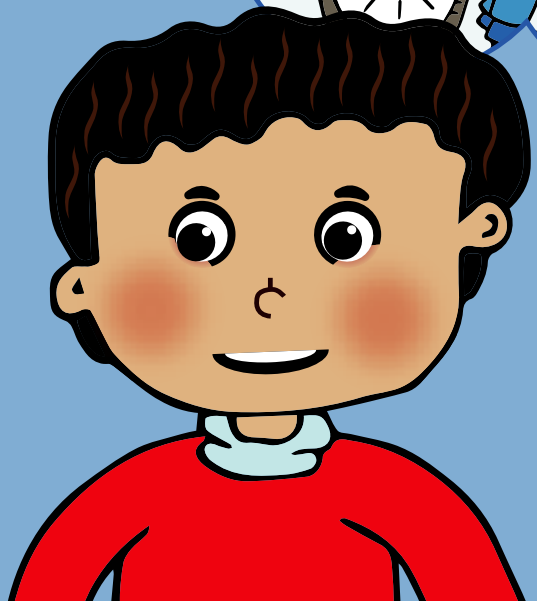
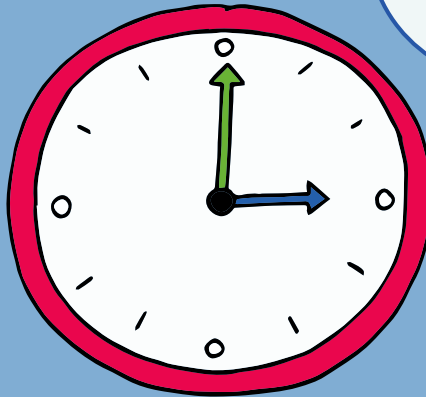
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A DAY IN MY LIFE





MEET NOUR'S FAMILY

Follow along as the teacher reads the story.

Hi! My name is Nour. I am 7 years old. I live in Cairo. I have a big sister named Sara and a little brother named Samir.



We live with our mom, dad, grandma, and grandpa. We live in a tall apartment building. I also have an aunt, an uncle, and two cousins. They live in Cairo near us.



FAMILY RESPONSIBILITIES

Listen for who is responsible for jobs in Nour's family.



Everyone helps in my house.

My mom and dad work during the day.

My grandma and grandpa take care of my brother, Samir.

Grandma goes to the market to buy food.

Grandma also cooks dinner. My big sister Sara and I help her prepare dinner. After we eat, everyone cleans the kitchen.

Dad helps my sister and me with our homework.

My mom cleans the house. My big sister Sara helps my mom clean too.

If something breaks in the house, my dad fixes it. When the leg of our table broke, my dad let me help fix it, too. I really enjoy being helpful to my family.





MY RESPONSIBILITY IN MY FAMILY

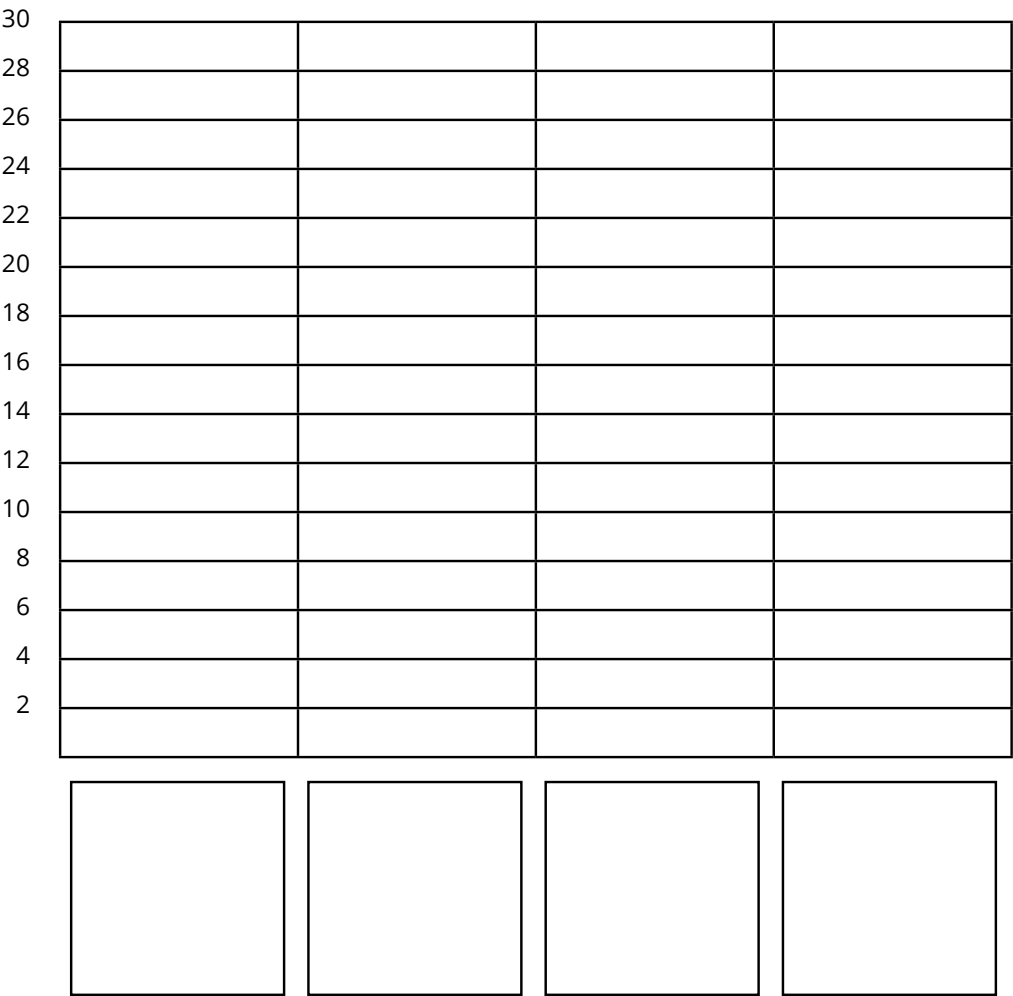
Draw and write a sentence to describe your job, or responsibility, in your family.

A large, empty rectangular box with a red border, intended for a child to draw a picture related to their family responsibility.Four sets of primary writing lines, each consisting of a solid blue top line, a dashed pink middle line, and a solid blue bottom line, for writing a sentence.



GRAPHING OUR FAMILY RESPONSIBILITIES

Pick four jobs students have in their families. Draw a picture showing each responsibility. Complete the bar graph to show how many students have that job in their family.





GOOD MORNING NOUR

Think about the problems Nour faces in the morning.
Follow along as the teacher reads.

I am very busy every day! First, my sister and I get ready for school. We have to share a bathroom. My sister Sara takes a long time to get ready. She makes us late sometimes.



My mom tells us to set a timer.
This way, Sara will get ready faster.

Before we leave, we eat a quick breakfast. Grandma made us fuul.
I am still hungry. Grandma makes me a fruit salad as well.

My sister and I walk to school together. The road can be very busy. I ask her to hold my hand. This way I stay safe. I am happy when we finally get to school. I wonder what we will do today!





PROBLEMS AND SOLUTIONS

Complete the graphic organizer. Record three problems that Nour faces, then write about or draw a picture of her solution.

PROBLEM	SOLUTION



MY PROBLEM AND SOLUTION

First, draw your ideas in the problem/solution organizer.
Then write to share your problem and how you solved it.

PROBLEM	SOLUTION

MY PROBLEM:

MY SOLUTION:



WORKING WITH MY CLASSMATES

Write about a time you worked with a classmate.
Who did you work with? What did you do together?

I worked with

Together we



I CAN COOPERATE AT SCHOOL

Listen to each sentence. Circle the sentences that describe cooperation.

I share my materials.

I ignore my Shoulder Partner's ideas.

I use words like "please" and "thank you" with my classmates.

I treat my classmate with respect as we work together.

I never give up when I am working with a classmate.

I always want to use my idea and not my partner's.

Complete the sentence to tell what cooperation means.



Cooperation means _____.





BEING RESPECTFUL

Under the smiley face, list behaviors that show being respectful.
Under the sad face, list examples of disrespectful behavior.

 RESPECT	 DISRESPECT



NOUR SHOWS GOOD CITIZENSHIP

Follow along as the story is read. When you hear Nour being a good citizen, draw a smiley face next to that line in the text. In the story, circle an example of showing fairness, honesty, and respect.

At break time a classmate asked if she could sit with me. I said, "Yes." I made room at the table.



Outside, my classmates were arguing. They could not decide what to play. "Let's play football," I said. We can all play football together.



In the classroom, our teacher handed out our workbooks. My teacher gave me the wrong book. I raised my hand to let my teacher know. I did not want to write in someone else's workbook. She thanked me for my honesty. It always feels good when I do the right thing.



NOUR'S DAILY ROUTINE

As the story is read, listen for things Nour is doing that might stay the same from day to day. When you hear an example, show a Thumbs Up.



Each morning starts the same way. My alarm clock rings. I wake up. I get dressed. I brush my teeth and my hair. Grandma makes me breakfast. Sometimes grandma lets me choose what to eat.

Next, my sister and I walk to school. My sister walks me to my classroom. I put away my school bag. I wonder what I will learn. We eat lunch in the afternoon.

Once school ends, I go home. I do my homework first. Then I get to choose what to do. Sometimes I read. Sometimes I play with my friends.



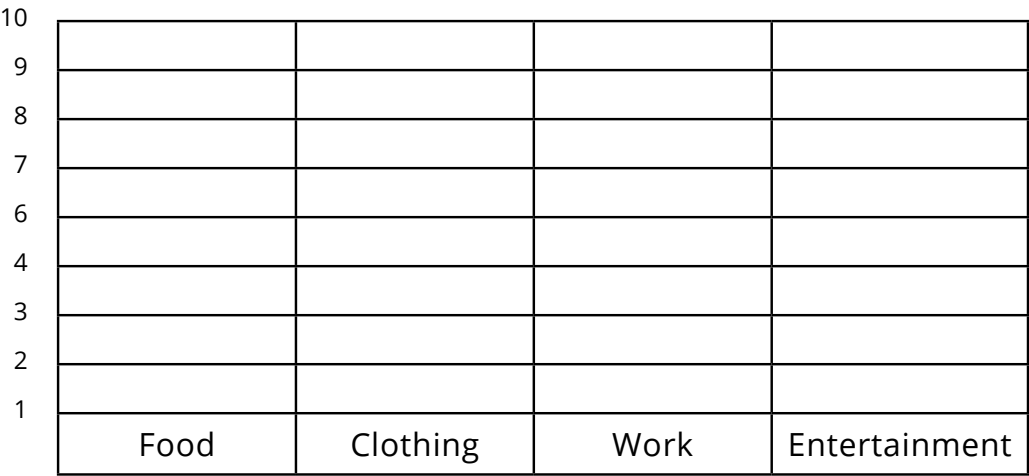
In the evening, my family eats dinner. After dinner we get ready for bed. Mom reads me a story. I cannot wait for another exciting day.



GRAPHING OUR CHOICES

Look at the class list. Count how many choices are made for each category. Record the number on the graph.

Our Choices





READING A CLOCK

Record the time on the analog clock on the line under the clock.





Get Up and Move Clock



When the music stops, stand next to another student's clock. Write the name of the student and record the time shown.

PRIMARY 2



TIME TO TRY SOMETHING NEW

Write the things you **MUST DO** and things you **WANT TO DO** today.

PRIORITIES

MUST DO

WANT TO DO



	Time I Will Spend ----- _____	Time I Actually Spent	How I Feel
SUNDAY	_____ ----- _____	_____ ----- _____	_____ ----- _____
MONDAY	_____ ----- _____	_____ ----- _____	_____ ----- _____
TUESDAY	_____ ----- _____	_____ ----- _____	_____ ----- _____
WEDNESDAY	_____ ----- _____	_____ ----- _____	_____ ----- _____
THURSDAY	_____ ----- _____	_____ ----- _____	_____ ----- _____
FRIDAY	_____ ----- _____	_____ ----- _____	_____ ----- _____
SATURDAY	_____ ----- _____	_____ ----- _____	_____ ----- _____

PEACE BREAKER OR PEACE MAKER

Copy three words from the class chart paper into the correct columns.

PEACE BREAKER	PEACE MAKER
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>





STRATEGIES FOR PEACE

Put your pencil in the loop of a paper clip. Place this in the center of the circle. Spin the paper clip to see where it points.





Topic





PROPS

Handwriting practice lines for the 'PROPS' section. The section contains four sets of lines, each consisting of a solid top line, a dashed middle line, and a solid bottom line. A blue hand icon is positioned in the center of the fourth set of lines.



SCENERY

Handwriting practice lines for the 'SCENERY' section. The section contains four sets of lines, each consisting of a solid top line, a dashed middle line, and a solid bottom line. A blue hand icon is positioned in the center of the fourth set of lines.



PEER FEEDBACK

Mark the middle column with your feedback.
Use one ☆, two ☆☆, or three ☆☆☆.

Group

CATEGORY	☆, ☆☆, ☆☆☆	SUGGESTIONS
TOPIC		
SPEAKING SKILLS		
PROPS		
SCENERY		



MY SELF-ASSESSMENT

Read each statement. For each row, color the stars in the box that describes your effort.

	☆	☆☆	☆☆☆
Academic Content	☆ I can solve a problem with help.	☆☆ I can solve a problem independently.	☆☆☆ I can solve a problem independently in more than one way.
Quality of Performance	☆ I spoke softly or was hard to understand.	☆☆ I spoke clearly.	☆☆☆ I spoke clearly and with excellent expression.
Life Skills	☆ I worked alone.	☆☆ I worked with my group.	☆☆☆ I worked with my group and we helped each other.



Rubric Assessment (for teacher use)

	Approaching Expectation (1)	Meeting Expectation (2)	Exceeding Expectation (3)
Academic Content	Describes how compromise is used to solve a problem in the play with help. <i>Social Studies A.1.c</i>	Describes how compromise is used to solve a problem in the play. <i>Social Studies A.1.c</i>	Describes how compromise is used to solve a problem in the play and offers an alternative solution not already included in the play. <i>Social Studies A.1.c</i>
	Contributes to a script, props, or scenery that are not well matched to the topic of the play. <i>Drama B.2-4</i>	Contributes to a script, props, or scenery that are appropriate to the topic of the play. <i>Drama B.2-4</i>	Creatively contributes to a script, props, or scenery that match and enhance the topic of the play. <i>Drama B.2-4</i>
Quality of Performance	Speaks in a voice that may be difficult to hear and does not use expression and/or body language. <i>Speaking and Listening A.4.a.</i>	Speaks in a clear voice, with expression and body language appropriate for the scene. <i>Speaking and Listening A.4.a.</i>	Speaks in a clear voice, with expression and body language that enhances the scene. <i>Speaking and Listening A.4.a.</i>
	Creates props or scenery that are messy.	Creates props or scenery that are neat and well constructed.	Creates unique props or scenery that are neat, well constructed, and help to enhance the story.
Life Skills	Gives feedback that is general.	Gives feedback that is specific and relevant to the work.	Gives thoughtful feedback that is specific and relevant to the work and may offer a unique perspective.
	Listens to and respects others' opinions when frequently reminded, or talks over others to state own opinions.	Listens to and considers others' opinions in classroom discussions.	Listens to, considers, and voluntarily asks for others' opinions in classroom discussions.

TAKING CARE OF ME





NOUR'S GROWING FAMILY

Follow along as the teacher reads aloud.

Hi again. I have exciting news. My aunt just had a baby. I have a new cousin.



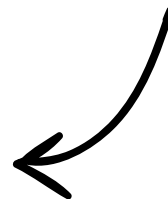
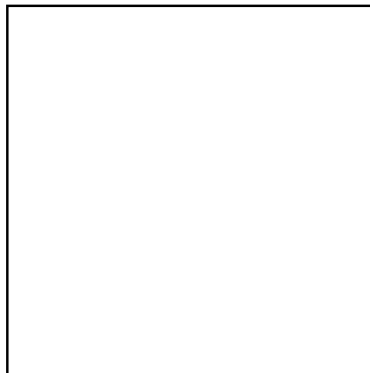
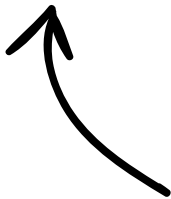
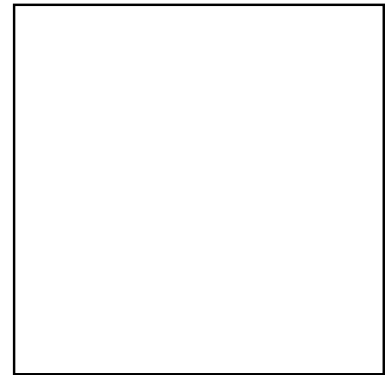
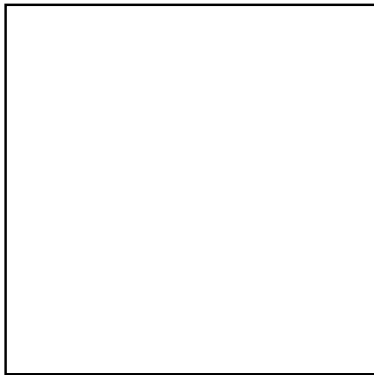
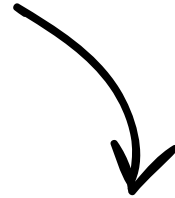
She is so small. She needs a lot of help.
How do you think I can help her? I want her to stay safe and healthy.



THE BABY'S LIFE CYCLE

Draw pictures to show how Nour's cousin will grow and change.

BABY





BABY BIRDS

Follow along as the teacher reads.

At my home I can see another baby.
These babies are living in a nest.
They are birds.



Yesterday there were three eggs in the nest.
Now I can see three new baby birds.

I can see the mother bird taking care
of the babies. She brings the babies
food when they cry.



She sits on them to keep them warm.
I cannot wait to watch the baby birds grow up.



A BIRD'S LIFE CYCLE

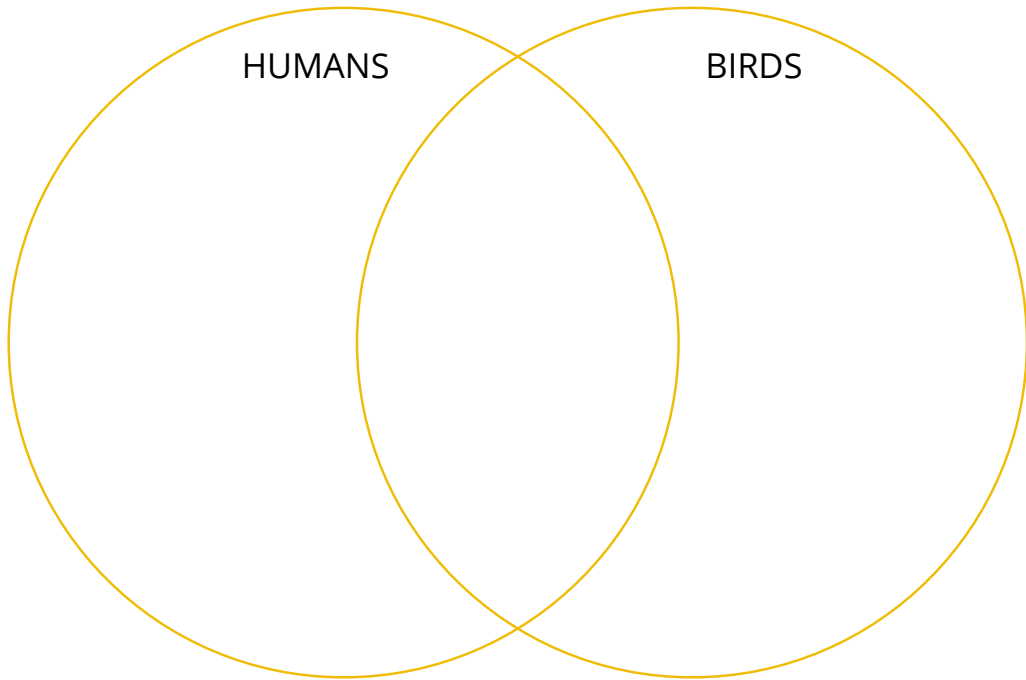
Observe the bird's life cycle. What is happening between each stage?





COMPARING LIFE CYCLES

Use the Venn Diagram to compare the human and bird life cycles.



Write to explain one similarity and one difference in the life cycles.

The life cycles are similar because

The life cycles are different because



FEEDING BABY BIRDS

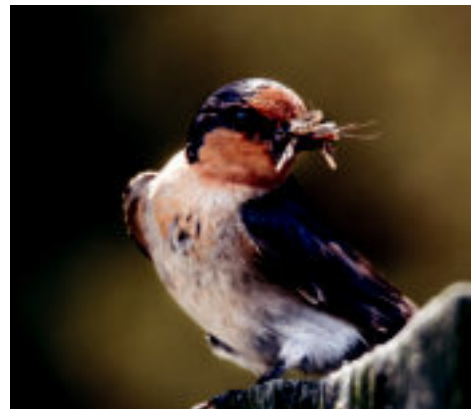
Follow along as the teacher reads.

My mom told me the birds outside our home are called swallows.
I like to watch the mother bird take care of the babies.

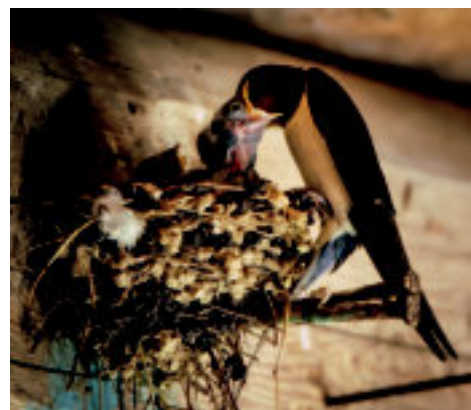
I watch her fly in the air.



Then I see her catch a bug.



At the nest, she uses her beak to feed the babies.





THE BIRD'S BODY

Label the body parts.

BODY PART WORDS

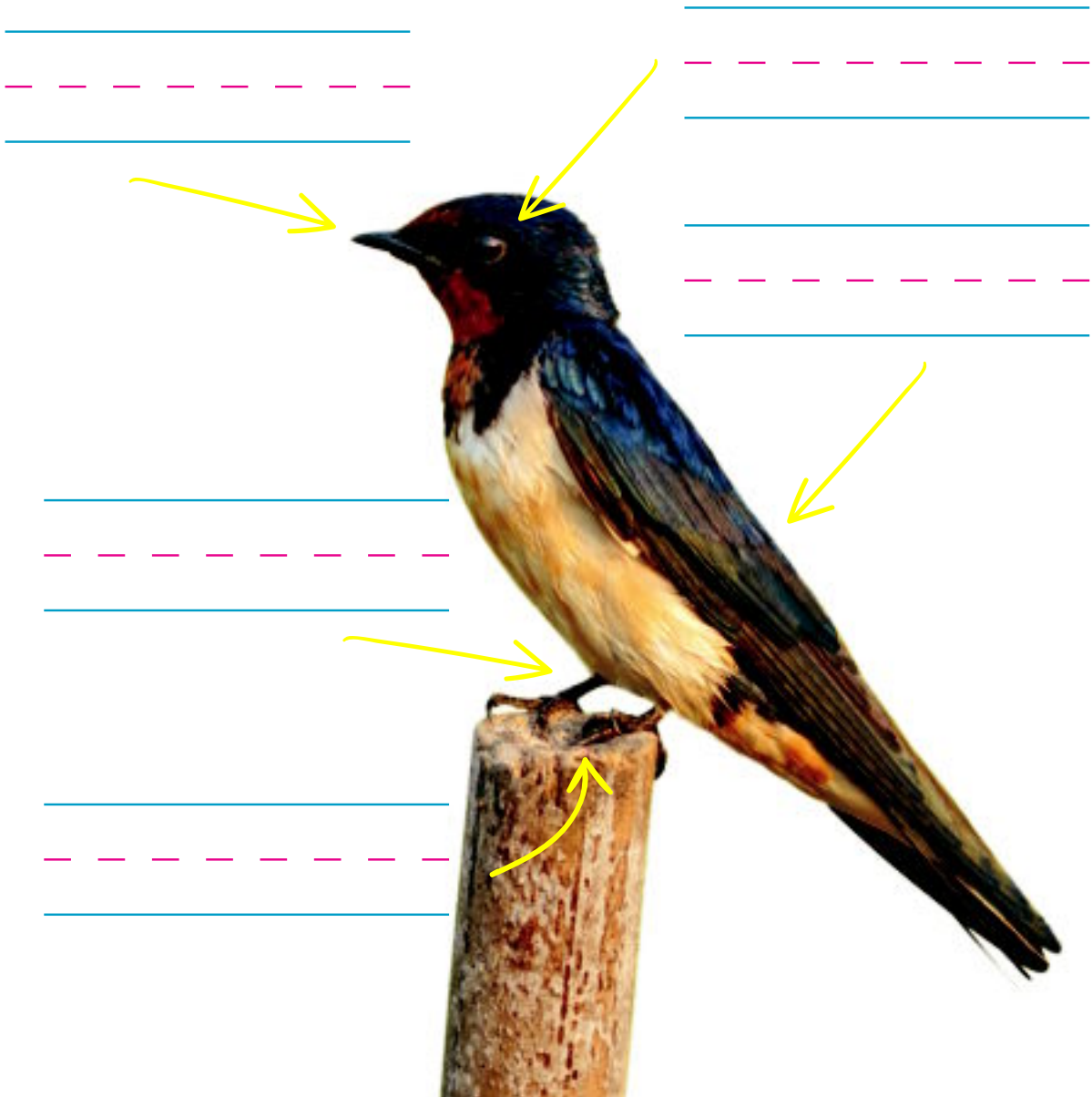
Legs

Eyes

Beak

Claws

Wings





I CAN EAT

Draw a picture of yourself eating a meal. Explain how your body parts help you eat.

I use my	<hr/> ----- <hr/>	to	<hr/> ----- <hr/>	.
I use my	<hr/> ----- <hr/>	to	<hr/> ----- <hr/>	.
I use my	<hr/> ----- <hr/>	to	<hr/> ----- <hr/>	.



GOLDEN EAGLE

Circle the body parts named in the reading passage.



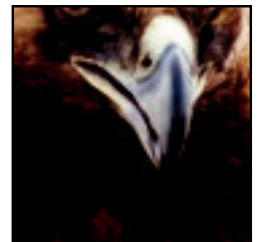
A golden eagle eats rabbits, mice, foxes, and deer.

A golden eagle has good eyesight.

It has strong talons to catch and carry its prey.

It uses its strong beak to eat.

The golden eagle has large wings to help it fly fast through the air.





Write your opinion. What is the most important body part for the golden eagle to obtain food? Write a reason to support your opinion.

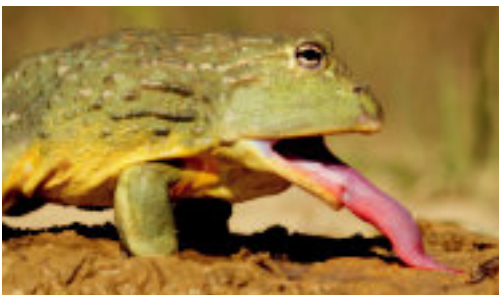
I think the most important body part for the golden eagle to obtain food is the

I think this because



WHAT CAN I EAT?

Observe the animal body parts. Match the food that you think best fits the body part.



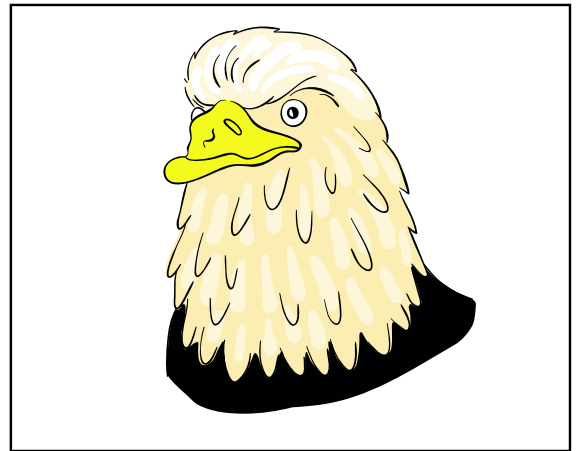


MEET NATE CALVIN

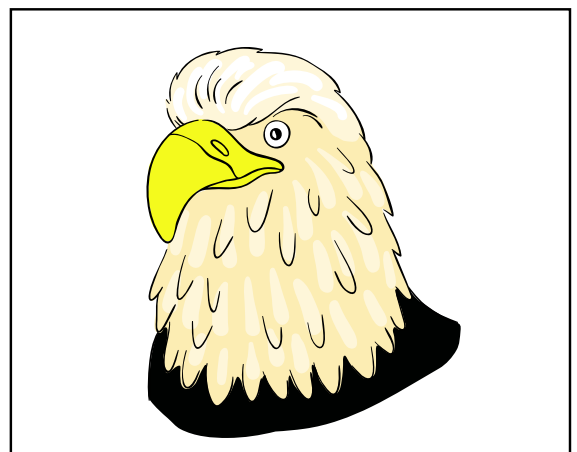
Follow along as the teacher reads.

Nate Calvin is an engineer. An engineer is a person who works to solve real-life problems.

Mr. Calvin saw an eagle who was missing its sharp beak. He wanted to help.



Mr. Calvin wanted to make the eagle a new beak. He collaborated with other engineers. They drew plans for a new beak made out of plastic. They created the beak on a 3D printer. A dentist helped attach the beak to the eagle. Now the eagle can eat again.

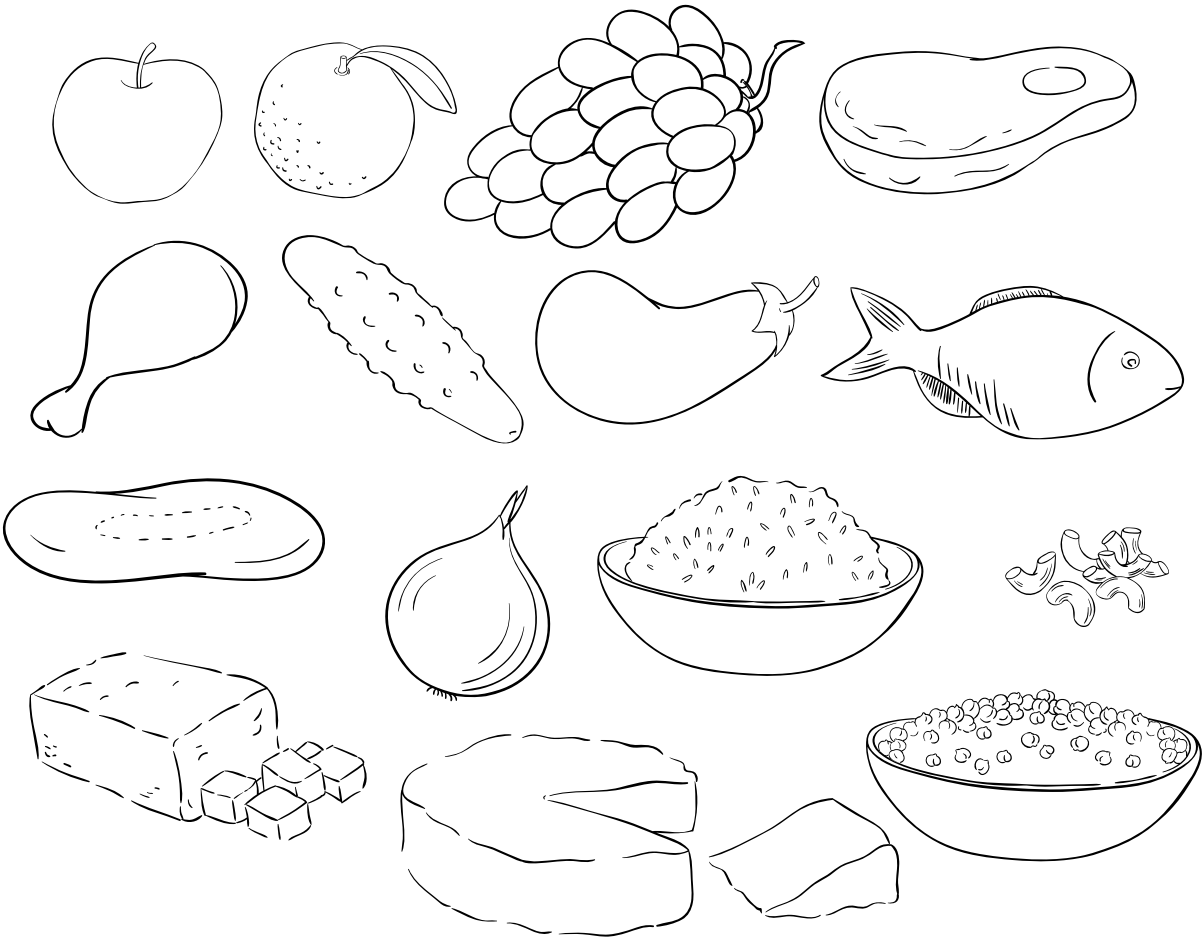




FOOD GROUPS

Using the table below, color the foods according to food group.

RED	YELLOW	BROWN	GREEN	ORANGE
Meat, Dry Beans, Eggs, and Nuts Group	Milk, Yogurt, and Cheese Group	Bread, Cereal, Rice, and Pasta Group	Vegetable Group	Fruit Group



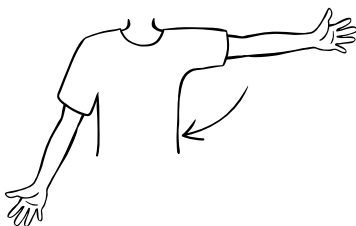
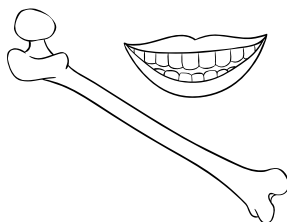
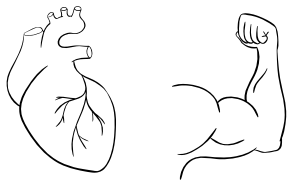
Write the letter P next to the food if it comes from a plant and the letter A if it comes from an animal.



HOW HEALTHY FOODS HELP US

Match the food to how it helps your body. Complete the phrases that describe one benefit of each group.

HOW IT HELPS YOUR BODY



FOOD GROUP

Milk, Yogurt, and Cheese

Builds strong _____.

Meat, Poultry, Fish, Dry Beans,
Eggs, and Nuts

Builds strong _____.

Fruit

Provides _____.

Bread, Cereal, Rice, and Pasta

Provide _____.

Vegetables

Help us _____.



MAKING CHOICES

Listen for choices Nour and her sister make. When you hear a choice, show Thumbs Up. Consider how each choice affects other people.

After a fun day at school, my mother reminds me that I need at least 30 minutes of exercise. I like to listen to music while I exercise. Sometimes my mother tells me my music is too loud. My sister likes to go outside and practice her football kicks against a wall. She makes sure there are no windows where she is kicking.



When we are finished exercising, we like to watch TV while dinner is cooking. My mother helps us stay healthy. She cooks meals that include all the food groups. Sometimes I do not want to eat my vegetables. My father tells me that eating my vegetables will keep me strong and healthy. If we stay healthy, we do not have to spend money to visit a doctor.

After dinner, I read or play quietly until bedtime. I have a specific time to go to bed every night because getting enough sleep helps my brain and body be healthy.



SOLVING PROBLEMS

Read the story problems. For each problem, write a number sentence to show what is happening in the story. Then, solve the problem.

1. Nour wants to practice football with Sara for 30 minutes and jump rope for 5 minutes. How many minutes will Nour exercise in all?
2. Your goal is to eat 5 servings of vegetables every day. You ate 2 servings at breakfast and 1 serving at lunch. How many more servings should you eat at dinner to reach your goal?
3. You have 60 minutes of free time. You decide to play for 40 minutes. How much free time do you have left after playing?

4. Your friend eats 5 servings of vegetables, 4 servings of meat, 2 servings of fruit, and 2 servings of milk. How many servings did he eat in all?

5. Nour has 60 minutes of free time. If she eats a snack for 5 minutes and plays for 35 minutes, does she have time left to do anything else? If so, how much time is left?





CLEANING VEGETABLES

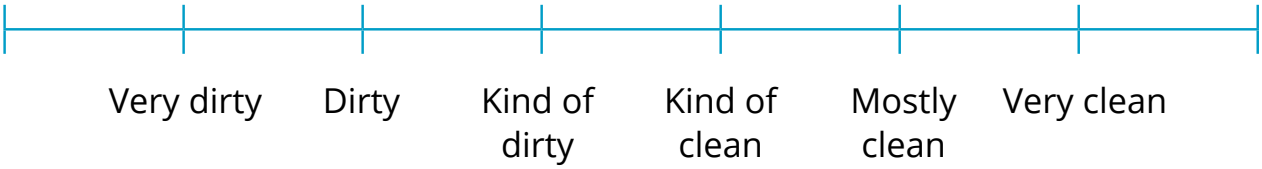
Draw a “before” picture of the vegetable as it comes out of the soil. Draw an “after” picture after using all of the cleaning tools.

BEFORE

AFTER

How clean is the vegetable after using each cleaning tool?

Mark a 1 on the line to show your answer after using the towel. Mark other tools using 2, 3, and so on. Mark a W on the line after using water.



Record the number or letter used for each tool so you can remember.

TOOL	NUMBER
towel	1
water	W

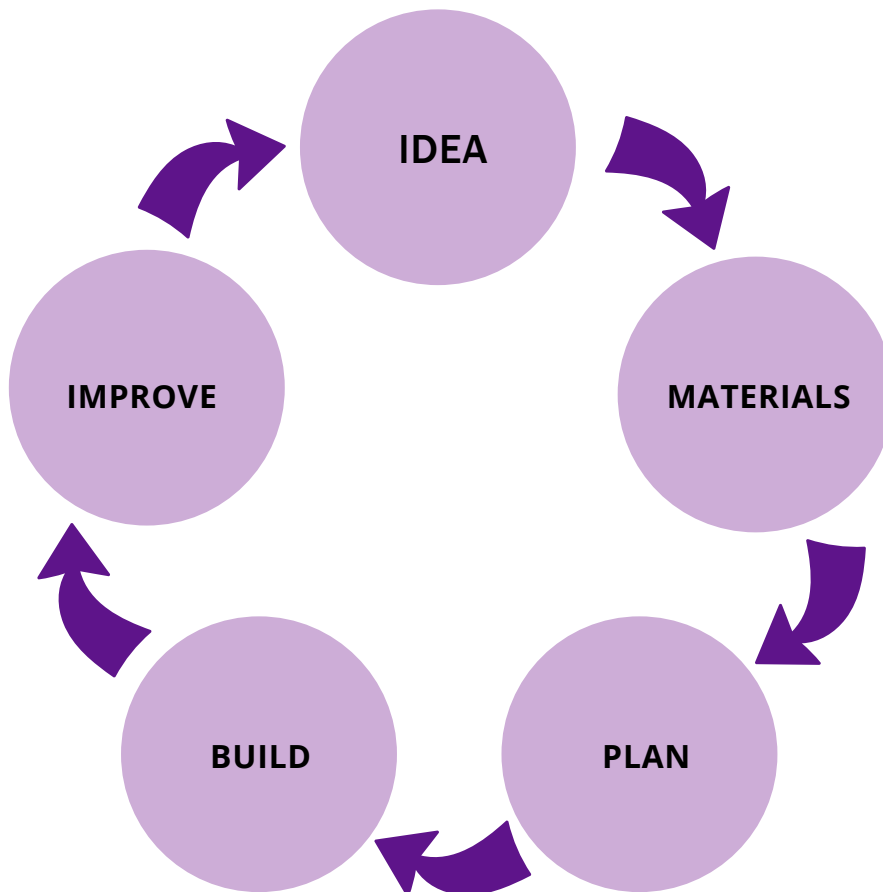
Cleaning vegetables that grow in the ground is important because



ENGINEERING DESIGN PROCESS

Underline each step in the story with the color listed below.

IDEA BLUE	MATERIALS GREEN	PLAN YELLOW	BUILD ORANGE
----------------------------	----------------------------------	------------------------------	-------------------------------



Mr. Calvin saw an eagle who was missing its sharp beak. He wanted to help. Mr. Calvin wanted to make the eagle a new beak. He collaborated with other engineers. They drew plans for a new beak made out of plastic. They created the beak on a 3D printer. A dentist helped attach the beak to the eagle. Now the eagle can eat again.



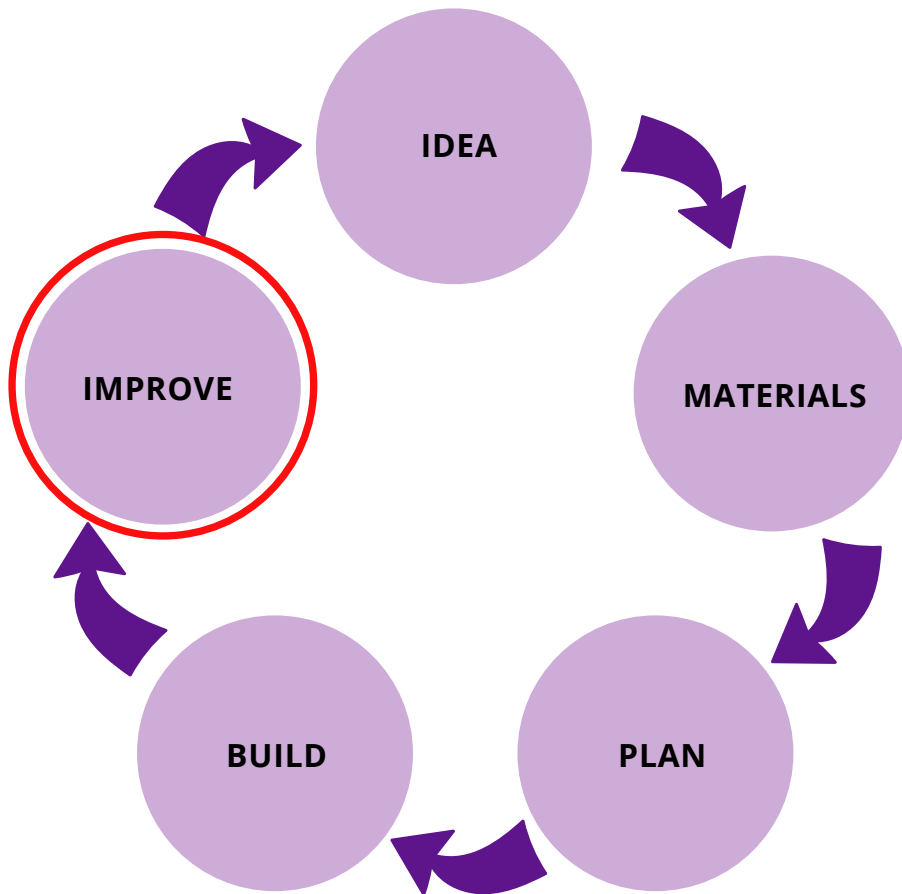
PAPER CHAIN CHALLENGE

Using just one piece of paper, create the longest chain possible.
You can cut the paper any way you want.



MY IMPROVED PLAN

Write or draw your ideas for your improved plan.





VEGETABLES FROM MY GARDEN

Follow along as the teacher reads.

We have a small vegetable garden on the roof of our apartment building. Today, I helped grandma pick vegetables for dinner.

We picked spinach and eggplant. It was hard work picking all of the spinach leaves. The eggplant was prickly. It was hard to cut the eggplant off the stem.



When we came inside, we had to clean the vegetables. The sink was full of dishes. It was hard to find space to clean the vegetables. Plus, grandma did not want me to use the towel we use for the dishes. Collecting healthy food for dinner was hard work.





MY GROUP'S FIRST PLAN

Draw your group's first plan.





PLANNING A COMMERCIAL

Complete the statements to plan your commercial.

What does your product do?

What vegetable does it
collect or clean?

How much does it cost?

Who would want to buy it?

Why is your product the best?

How will people order it?

How will you hook your audience? Circle your strategy.

We will use feelings: Happy, Sad, Angry, Scared

We will use an expert: (who?)

We will use free gifts: (what?)

Is there a phone number or website?
If so, what is it?

Will you add a tune or jingle to
make it memorable? Yes/No



MY FAVORITE COMMERCIAL

Complete the statements about your favorite commercial.



1. Tool or device being sold

2. This is my favorite commercial because

Circle all that apply.

I would buy this tool/device.

This commercial: used an expert offered a free gift

I know how to order this tool/device.

This commercial had a catchy tune or jingle.

The group used extra props or a poster.

It was easy to understand the group as they spoke.

This commercial made me feel: happy sad worried angry



MY SELF-ASSESSMENT

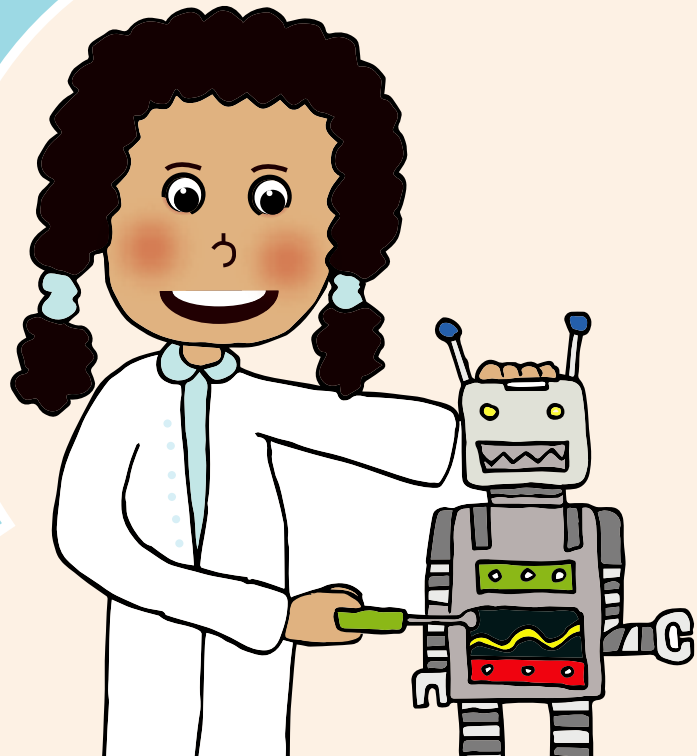
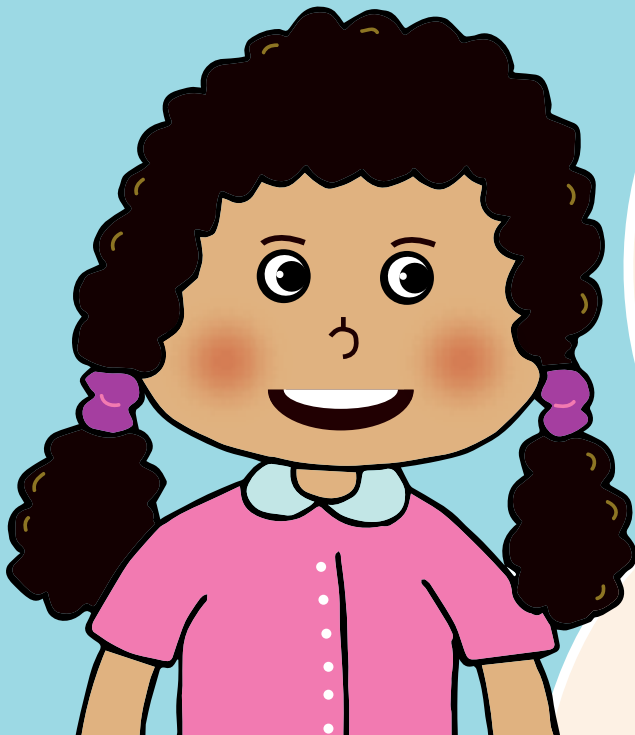
Read each statement. For each row, color the stars in the box that describes your effort.

	☆	☆☆	☆☆☆
Academic Content	☆ I used the engineering design process with help.	☆ ☆ I used the engineering design process to plan and create a tool.	☆ ☆ ☆ I used the engineering design process to plan and create a tool. I can describe each stage of the process.
Quality of Performance	☆ I had some trouble describing my plan clearly.	☆ ☆ I used words and/or pictures to clearly describe my plan.	☆ ☆ ☆ I used words and/or pictures to clearly describe my plan in detail.
Life Skills	☆ I had some trouble working with my group or completing my task.	☆ ☆ I worked well with my group and completed my task.	☆ ☆ ☆ I was a leader in my group, helping others work together and complete their tasks.

Rubric Assessment (for teacher use)

	Approaching Expectation (1)	Meeting Expectation (2)	Exceeding Expectation (3)
Academic Content	Identifies choices that people can make to keep themselves healthy with help. <i>Economics and Applied Science 2.b.</i>	Identifies choices that people can make to keep themselves healthy. <i>Economics and Applied Science 2.b.</i>	Identifies a wide variety of choices that people can make to keep themselves and those around them healthy. <i>Economics and Applied Science 2.b.</i>
	Explains how vegetables can be collected safely and/or cleaned properly with help but may not understand the importance of these practices. <i>Social Studies D.1.a.</i>	Explains how vegetables can be collected safely and/or cleaned properly and why this is important. <i>Social Studies D.1.a.</i>	Explains several ways that vegetables can be collected safely and cleaned properly and why these are important practices. <i>Social Studies D.1.a.</i>
	Creates a tool that does not serve its intended purpose. <i>Visual Art 2.c.</i>	Creates a model of a tool that could be used for its intended purpose. <i>Visual Art 2.c.</i>	Creates an original, effective tool that could be used for its intended purpose. <i>Visual Art 2.c.</i>
	Participates minimally in collaborative conversations and may not share ideas. <i>Speaking and Listening 1.a.</i>	Participates in collaborative conversations by sharing ideas and responding to the thoughts of others. <i>Speaking and Listening 1.a.</i>	Participates in collaborative conversations and works to ensure that others are given equal opportunities to share ideas and respond to the thoughts of others. <i>Speaking and Listening 1.a.</i>
Quality of Performance	Generates one idea to solve a design challenge. <i>Science F.1.e.</i>	Generates two or more ideas to solve a design challenge. <i>Science F.1.e.</i>	Generates a wide range of ideas to solve a design challenge in creative ways. <i>Science F.1.e.</i>
	Utilizes one of the persuasive techniques shared during class in the commercial but cannot explain its purpose. <i>Vocational Fields A.4.d.</i>	Utilizes one of the persuasive techniques shared during class in the commercial and can explain its purpose. <i>Vocational Fields A.4.d.</i>	Utilizes and explains persuasive techniques that make for a compelling and influential commercial. <i>Vocational Fields A.4.d.</i>
Life Skills	Ignores the feedback of others and may not make improvements to the plan or product.	Makes improvements to the plan or product based on the feedback of others.	Makes effective improvements to the plan or product based on the feedback of others. Asks for feedback without direction from the teacher.
	Offers feedback that is not helpful or does not relate to the plan or product.	Offers feedback to others that helps them improve their plan or product.	Offers insightful feedback to others that helps them improve their plan or product in a meaningful way.

WHEN I GROW UP





CATEGORIZING JOBS

Look at the professional categories below. List jobs from the class job web in each category.

AGRICULTURAL	INDUSTRIAL
COMMERCIAL	TOURISM
OTHER	



NOUR'S PARENTS

Follow along as the teacher reads aloud.

My dad is a construction worker in Cairo. He helps build new buildings. He wears a tool belt and a hard hat. The hat protects his head. His tool belt holds all his special work tools.



My mom works in a hotel. She is the concierge. She helps visitors find places to eat and things to do. She uses the phone and a computer to connect people and answer questions.



MY INTERESTS

Draw to share several of your interests.





PERSONAL INTEREST SURVEY

Put a checkmark next to each activity that you enjoy.

Box 1	Box 2
<input type="checkbox"/> Taking care of pets and animals	<input type="checkbox"/> Fixing things in your house
<input type="checkbox"/> Taking care of a garden	<input type="checkbox"/> Sewing or knitting
<input type="checkbox"/> Hiking and watching wildlife	<input type="checkbox"/> Building things (with tools, blocks, and so on)

Box 3	Box 4
<input type="checkbox"/> Selling things in your neighborhood	<input type="checkbox"/> Planning a trip or event
<input type="checkbox"/> Giving people advice on what to buy	<input type="checkbox"/> Cooking, baking, and serving meals
<input type="checkbox"/> Using a cash register	<input type="checkbox"/> Playing sports or other activities

Box 5
<input type="checkbox"/> Designing experiments
<input type="checkbox"/> Finding solutions to problems
<input type="checkbox"/> Learning about computers



ANALYZING OUR SURVEY

Count how many checks you made in each box on the previous page.
Write that number on the line in the matching box below.

Box 1 _____

Agricultural Jobs

- ☐ Taking care of pets and animals
- ☐ Taking care of a garden
- ☐ Hiking and watching wildlife

Box 2 _____

Industrial Jobs

- ☐ Fixing things in your house
- ☐ Sewing or knitting
- ☐ Building things (with tools, blocks, and so on)

Box 3 _____

Commercial Jobs

- ☐ Selling things in your neighborhood
- ☐ Giving people advice on what to buy
- ☐ Using a cash register

Box 4 _____

Tourism Jobs

- ☐ Planning a trip or event
- ☐ Cooking, baking, and serving meals
- ☐ Playing sports or other activities

Box 5 _____

STEM Jobs

- ☐ Designing experiments
- ☐ Finding solutions to problems
- ☐ Learning about computers



AGRICULTURAL

Observe the workers on the page. What tasks are the workers performing? What tools are being used?





INDUSTRIAL

Observe the workers on the page. What tasks are the workers performing? What tools are being used?





COMMERCIAL

Observe the workers on the page. What tasks are the workers performing? What tools are being used?





TOURISM

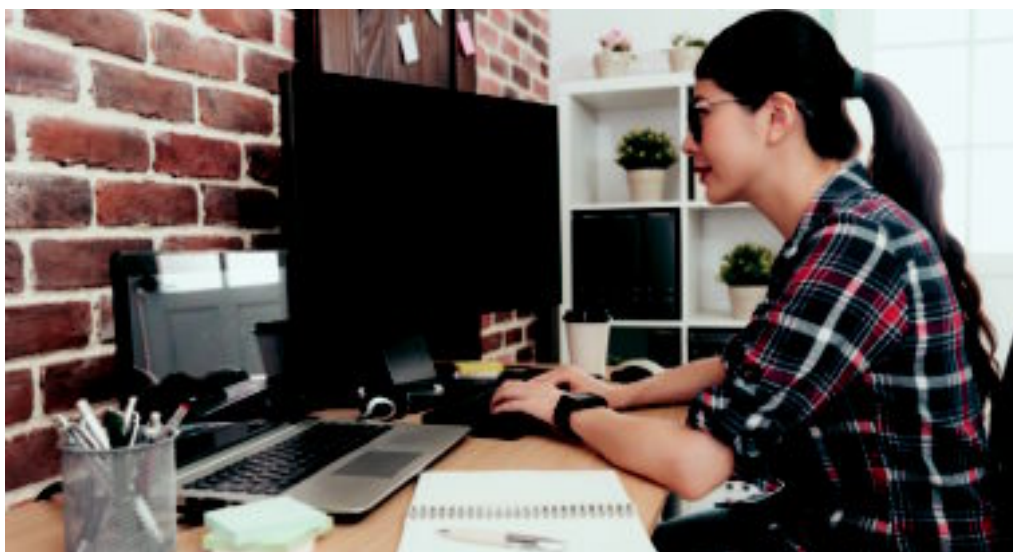
Observe the workers on the page. What tasks are the workers performing? What tools are being used?





STEM

Observe the workers on the page. What tasks are the workers performing? What tools are being used?





MY FAVORITE TOPIC

Draw and write to tell about your favorite topic at school.

Handwriting practice lines consisting of four sets of three horizontal lines (top solid blue, middle dashed pink, bottom solid blue).



VISITING MY AUNT AND UNCLE

Follow along as the teacher reads aloud.

I visited my aunt and uncle at work today. First, I went to my aunt's store. She sells clothes to people. She listens to how much money people have to spend. Then she finds the perfect outfit that will cost less. She adds up the cost in her head. She counts money the customers give her.



Next, I went to my uncle's job. He is an IT systems engineer. He knows a lot about how computers work. He listens to workers describe what they need computers to do. He researches and chooses computer programs that can help. He installs new programs and manages them when something goes wrong. He writes reports to the owners of the company to keep them informed.



I WORK IN A HOTEL

Underline examples of school topics where Nour's mom works.
Use the color guide below.

Math

Reading

Writing

Social Studies

Hello, I am Nour's mother.

I work in a hotel in the city.

I am a concierge. A concierge helps guests.

I give suggestions for restaurants.

I share information about places to visit in the city.

Sometimes I help guests before they arrive.

I send emails to future guests to give them ideas for their trip.

I can even plan a daily schedule for a guest.

I love helping visitors enjoy the city.





JOB RESEARCH

As you research, complete this page.

Name of job

Description of job

Yearly (annual) salary

Do I wear a uniform? Yes/No

Must I go to college? Yes/No

Do I work weekends? Yes/No

Do I work outside? Yes/No

Do I work in an office? Yes/No

Do I travel for my job? Yes/No

Do I work with people? Yes/No

Can I work in a small town? Yes/No

Do most cities have my job? Yes/No

Do I need special training? Yes/No

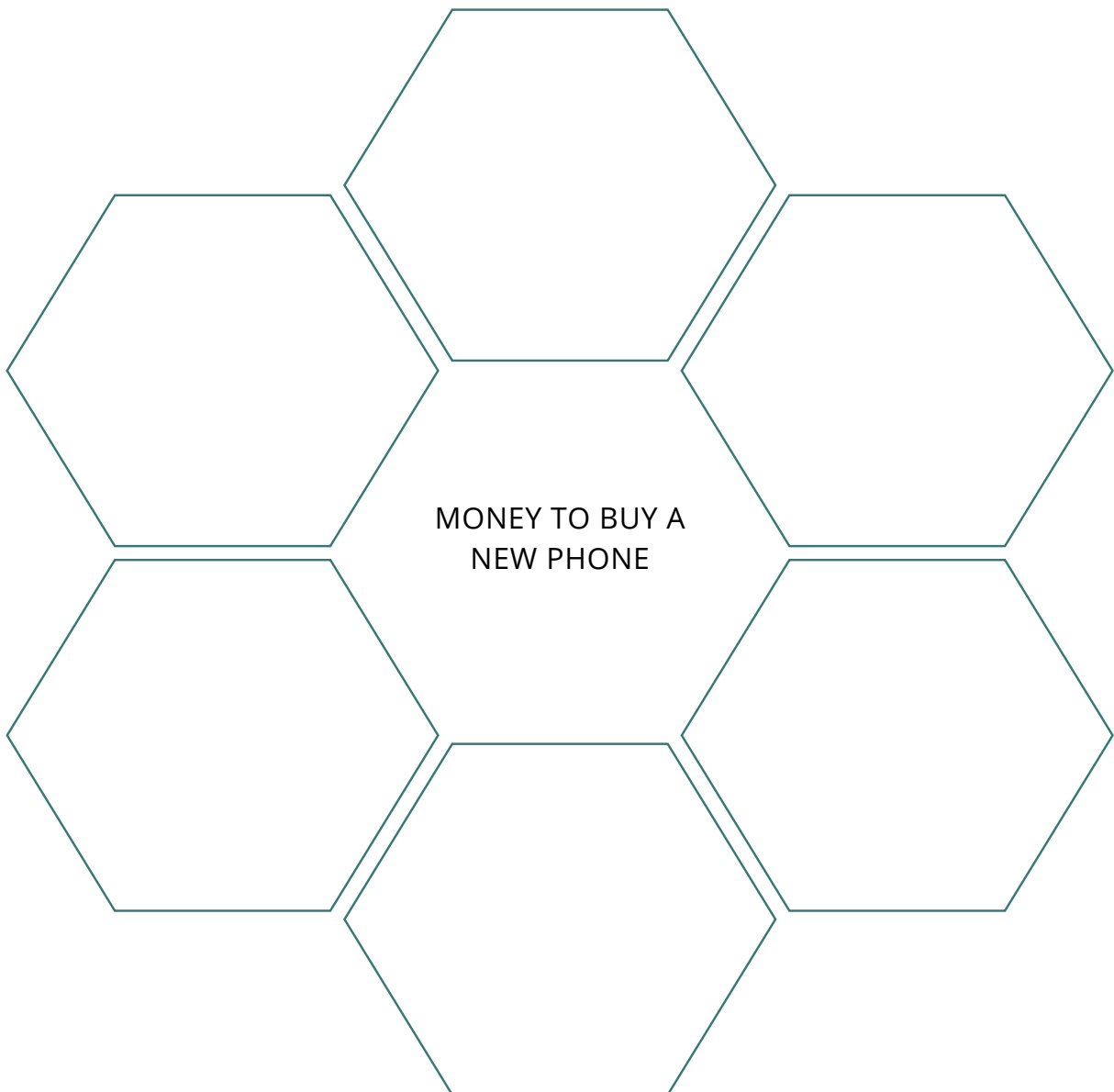
Do I use special tools? If so, what are they?

Other interesting facts:



INCOME

Use the graphic organizer to help Nour brainstorm ways to earn money.





MAKING CHOICES WITH OUR INCOME

Follow along as the teacher reads aloud.

My mom works 5 days a week. Each day she takes the bus. Her income helps pay for the bus. The bus costs her 10 LE each day. How much money does she need to use each week to get to work?

My dad uses his income to pay for food. He gives my grandma 100 LE each day to go to the market. Grandma buys food for the family. She buys fresh vegetables for 35 LE. She buys bread for 5 LE. She buys chicken for 58 LE. How much money does grandma spend altogether on food at the market?

How much money does she have left?



Two of my cousins need new notebooks for school. My uncle gives them 45 LE each. How much money do they have all together?

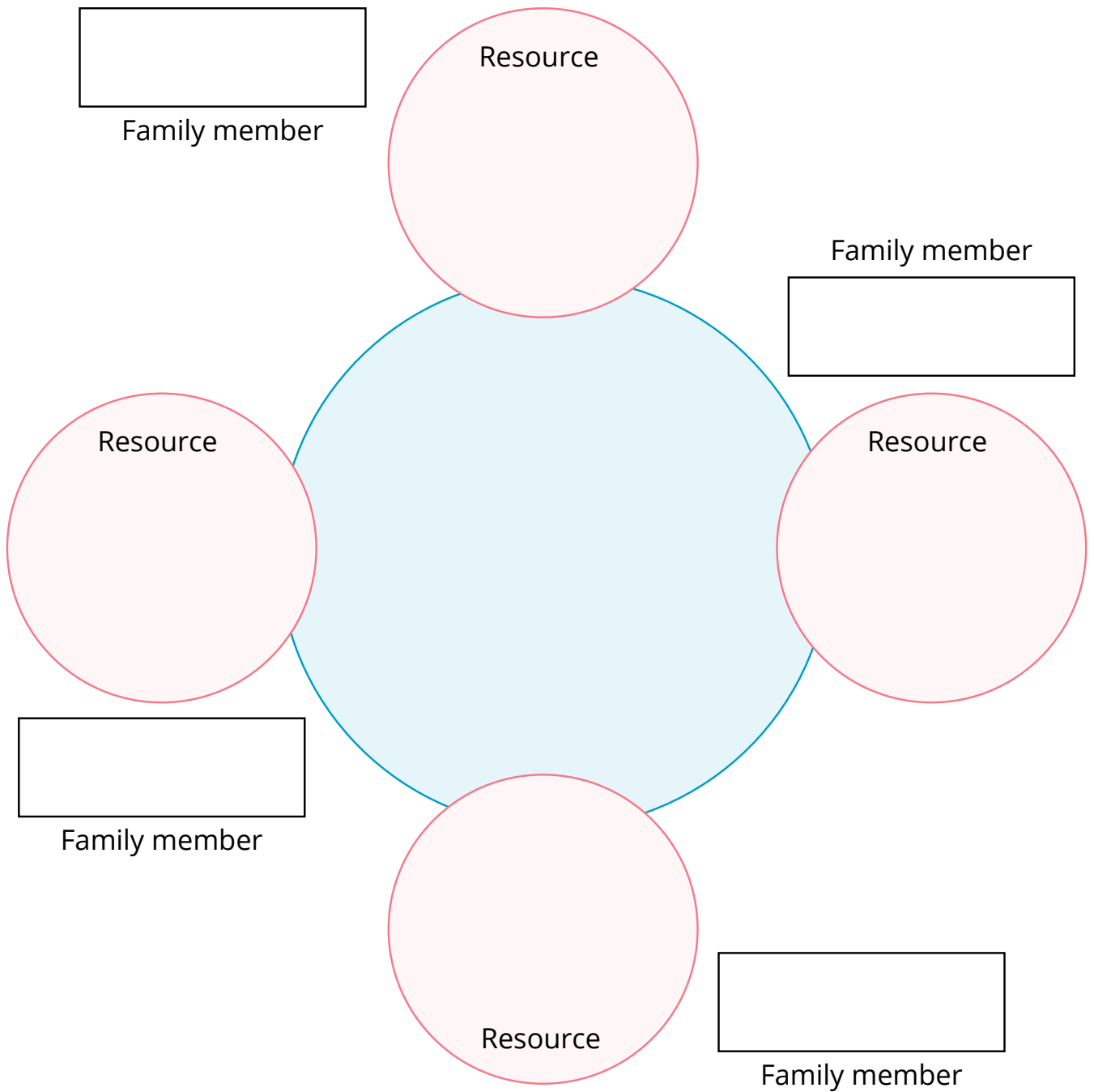
My mom and dad pay for my new clothes. Clothes cost 500 LE. My mom gives 200 LE for clothes. How much money does dad need to give?

My uncle earns 658 LE a week. My aunt earns 350 LE a week. My dad earns 529 LE a week. My mom earns 421 LE a week. Who earns the most money? Can you help me put their income in order from greatest to least?



INCOME WEB

Write all the ways the family used the income. Then, record who obtained that resource.





JOB ROLE PLAYS

Choose a role and act out a scene with your partner.
Then, switch and let your partner choose a role.

Tour Guide	Salesperson	Computer Programmer	Hair Stylist	Artist
Hotel Receptionist	Secretary	Electrical Worker	Robot Maker	Accountant (keeps track of money)
Banker	Farmer	Waiter or Waitress	Musician	Construction Worker
Firefighter	Taxi Driver	Police Officer	Veterinarian	Cook or Chef
Doctor	Jewelry Maker	Gardener	Welder (connects pieces of metal together)	Plumber
Teacher	TV Newscaster	Lawyer	Civil Engineer (builds bridges and buildings)	Pilot



I MIGHT SAY...

Choose five jobs from the list on the previous page. On each line, write the name of a job and then complete the sentence, "I might say...."

1.

I might say

2.

I might say

3.

I might say

4.

I might say

5.

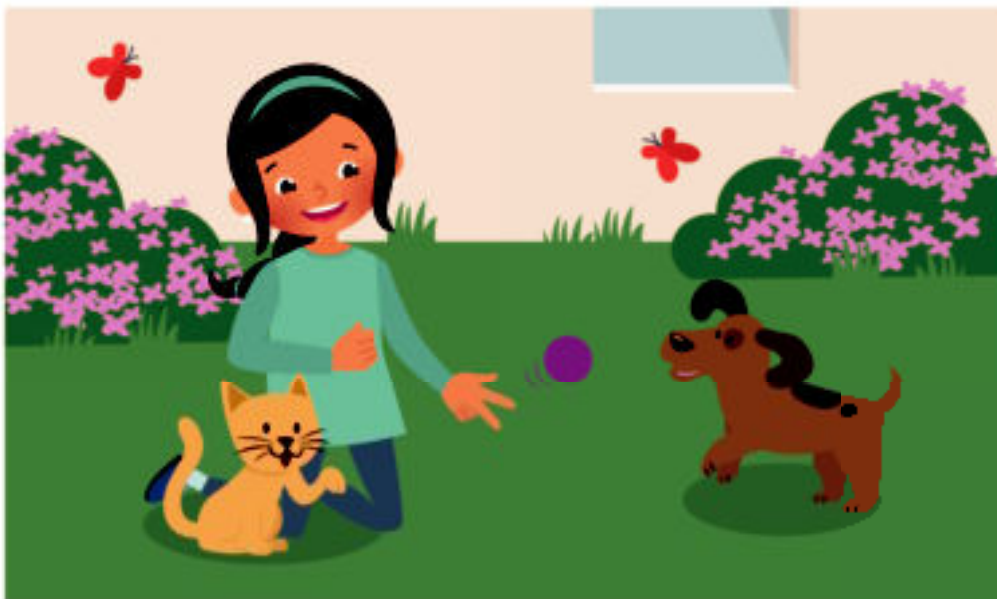
I might say



NOUR CHOOSES A JOB

As you read along, underline Nour's strengths and interests.

Nour loves to read stories about animals. She has two pets, a dog and a cat, at home. Nour walks the dog every day after school. She likes the exercise. Sometimes, Nour writes stories about her animals. Her mother says she has a very creative imagination. Nour wonders about the best way to keep her pets healthy. Last week, she checked a book out of the library on animal first aid. She wants to be prepared if her pets ever get hurt.



A job I think Nour might be interested in is



ADVERTISING MY DREAM JOB

Use this page to plan your poster for a job fair.

Job Title:

Category:

Drawing of person doing the job:

Tools:

Special skills/interests:



POSTER FEEDBACK

Switch books with your partner. Complete the following sentences about your partner's poster.

The best part of your poster is

because

is a little unclear.

Maybe you could



WHEN I GROW UP

Draw yourself as an adult working at your job.



MY SELF-ASSESSMENT

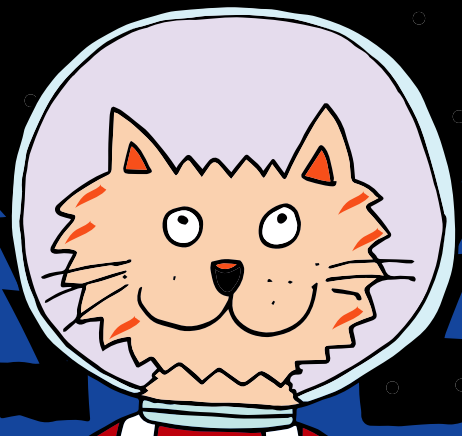
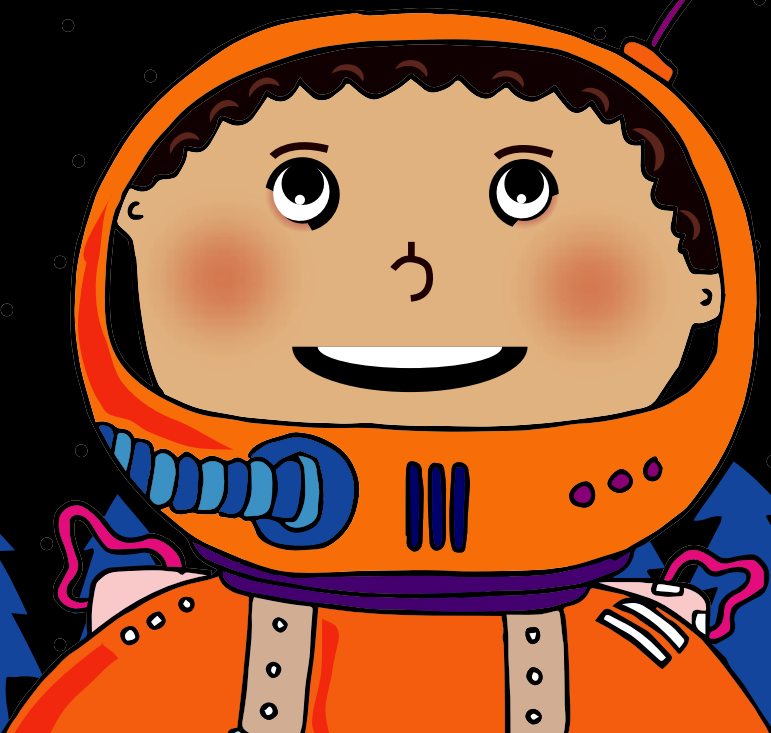
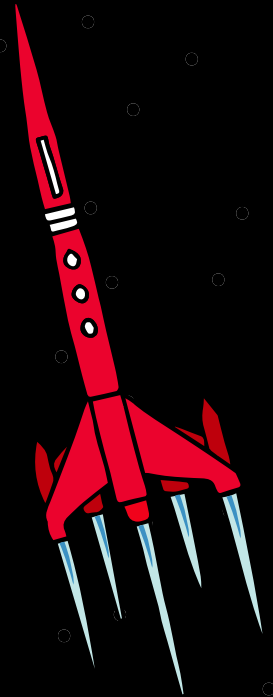
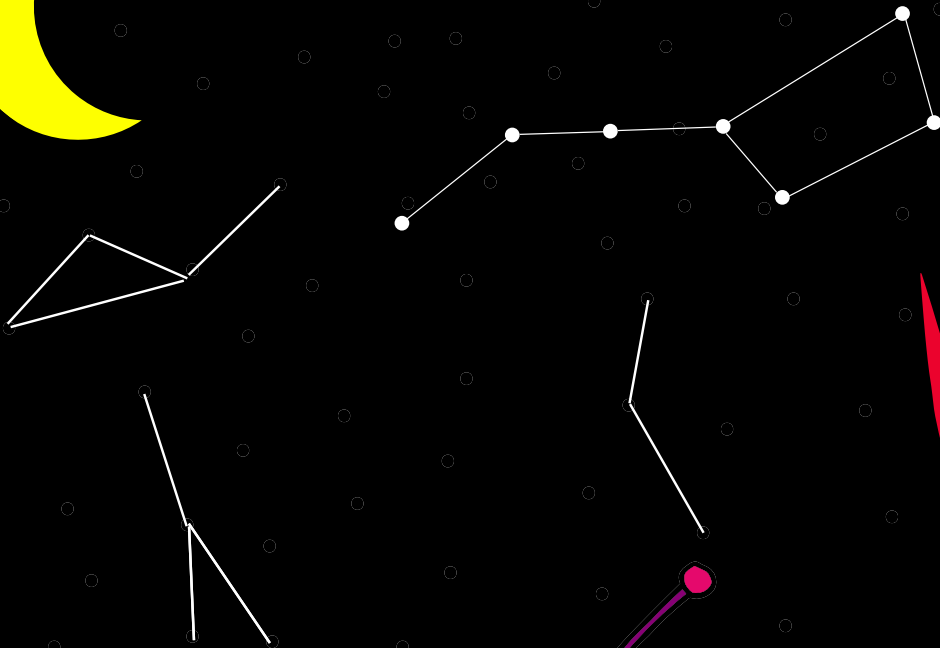
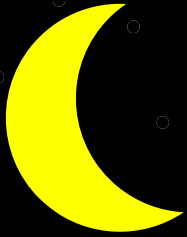
Read each statement. For each row, color the stars in the box that describes your effort.

	☆	☆☆	☆☆☆
Academic Content	☆ I can identify a profession that matches my interests and skills with help.	☆ ☆ I can identify a profession that matches my interests and skills.	☆ ☆ ☆ I can identify and describe in detail a profession that matches my interests and skills.
Quality of Performance	☆ I spoke clearly some of the time and I usually listened as others spoke.	☆ ☆ I spoke clearly, gave accurate information, and listened while others spoke.	☆ ☆ ☆ I spoke clearly, used eye contact, gave detailed information, and listened attentively while others spoke.
Life Skills	☆ I can ask questions and answer them but need to work on being more polite.	☆ ☆ I can ask questions and answer them politely.	☆ ☆ ☆ I can ask interesting questions and am very polite when asking and answering questions.

Rubric Assessment (for teacher use)

	Approaching Expectation (1)	Meeting Expectation (2)	Exceeding Expectation (3)
Academic Content	Identifies jobs held by people in the community but cannot identify the tools or skills used by those professionals. <i>Social Studies D.2.c.</i>	Identifies several jobs held by people in the community and some tools or skills used by those professionals. <i>Social Studies D.2.c.</i>	Identifies a variety of jobs held by people in the community and offers details about the tools and skills used by those professionals. <i>Social Studies D.2.c.</i>
	Explains the difference between interests and strengths and is able to provide abstract examples of each with help. <i>Vocational Fields A.4.b.</i>	Explains the difference between interests and strengths and is able to provide a personal example of each. <i>Vocational Fields A.4.b.</i>	Explains the difference between interests and strengths and is able to provide several personal examples of each while connecting them to professions. <i>Vocational Fields A.4.b.</i>
	Uses a graphic organizer to plan information for the job poster with help. <i>Writing D.1.a.</i>	Uses a graphic organizer correctly to plan information for the job poster. <i>Writing D.1.a.</i>	Creates an effective, original graphic organizer to plan relevant information for the job poster. <i>Writing D.1.a.</i>
	Participates minimally in collaborative conversations and may not share ideas. <i>Speaking and Listening A.1.a.</i>	Participates in collaborative conversations by sharing ideas and responding to the thoughts of others. <i>Speaking and Listening A.1.a.</i>	Participates in collaborative conversations and works to ensure that others are given equal opportunities to share ideas and respond to the thoughts of others. <i>Speaking and Listening A.1.a.</i>
Quality of Performance	Speaks to audience members but may be difficult to hear or understand.	Speaks clearly to audience members.	Speaks clearly to audience members with confidence and creativity.
	Creates visuals that are not very neat or are difficult to read.	Creates visuals that are neat and easy to read.	Creates appealing visuals that are exceptionally neat and easy to read.
Life Skills	Manages or organizes tasks ineffectively or only with the help of peers or the teacher.	Manages and organizes tasks effectively and independently.	Manages and organizes tasks effectively and helps to organize peers.
	Assesses self using a rubric with help and may have a hard time understanding how to meet expectations.	Assesses self accurately using a rubric.	Assesses self accurately using a rubric and is able to set goals for future work.

WHAT IS IN THE NIGHT SKY?





NOUR AND HOSSAM

Look at the illustrations. Read the story. Circle words you do not know.

Nour and her neighbor Hossam walk home from school. They hear a plane cross the sky.



Nour points to a cloud.

She says, "Look at the cloud.
It looks like my cat."

Hossam says, "Yes, it does."

Hossam points to another cloud.

"This one looks like a pillow."

Nour smiles. She says, "Last night I saw
the moon and the stars."

Hossam says, "Sometimes I wonder.
Why does the sky change so much?"



**I THINK**

Think about what you see in the sky. Under the words Night Sky, write what you see in the sky at night. Under the words Day Sky, write what you see during the day.

NIGHT SKY

DAY SKY

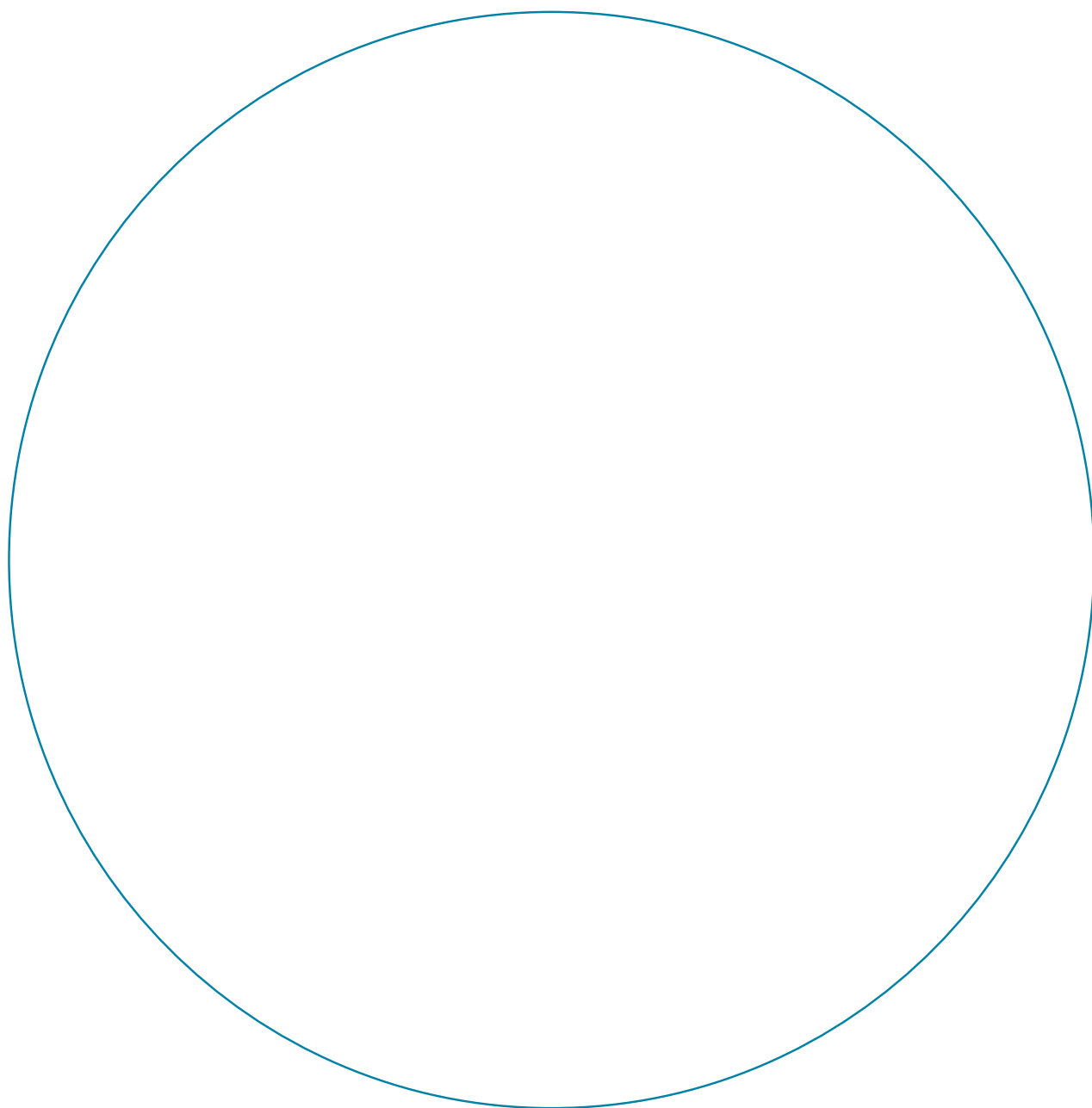
Draw a picture of the night sky.

Draw a picture of the day sky.



MY SKY

Draw the sky you saw last night. If you did not see the sky last night, you may draw from memory.





SHAPES IN THE SKY

Look at the images below. What do you notice?
What shapes and patterns do you see?





A HUNTER IN THE SKY

Look at the image of stars connected by lines. What do you see?
Read the story. Circle words you do not know.

Orion the Hunter

Orion was a very good hunter. He used a bow and arrows
to hunt. Two dogs helped him hunt. Use your imagination.

Can you see a hunter in the stars below?





OBSERVING A PATTERN

Read the story and study Hamid’s data. What pattern do you see? Using this pattern, help Hamid figure out what time Orion will rise for the next four nights.

Hamid lives in the desert.

At night, he loves to look at the stars.

He records his observations like a scientist.

His favorite constellation is Orion.

For one whole week, Hamid recorded the time he saw Orion appear.

NIGHT SKY	ORION’S RISE TIME
Sunday	8:36 p.m.
Monday	8:32 p.m.
Tuesday	8:28 p.m.
Wednesday	8:24 p.m.
Thursday	8:20 p.m.
Friday	
Saturday	
Sunday	
Monday	

1. What pattern do you see in Hamid’s data?

2. With every night that passes, the rise time of the stars is getting:

earlier later



SIRIUS: A SPECIAL STAR

Look at the illustration. Read the text. Then, circle Sirius in the picture of Canis Major.



Sirius is the brightest star in the constellation Canis Major. Can you find it?

Sirius is a very special star.

When ancient people saw Sirius rising just before the sun, they knew that the Nile River would soon flood.

Now we have a festival to mark that season. We call the festival Wafaa El-Nil.



IS OUR SUN LIKE A STAR?

Read the first question. Put your answer for our sun in the second column and for the stars in the third column.

Three things needed for a shadow:

1.

2.

3.

QUESTIONS	OUR SUN	A STAR
Can it cast a shadow?		
Can I read a book by its light?		
Can I feel its warmth?		



1. Look at the Teacher's Object.

The Teacher's Object is about as tall as:

My hand

One finger

One fingernail

My Hand

Teacher's Object



HOW BIG IS IT REALLY?

Follow the instructions. Record your observations.

4. When it is your turn, walk up to the Teacher's Object and place your hand next to it.

5. Circle what you observe to be the correct answer.

Compared to my hand, the Teacher's Object is:

taller the same size smaller

6. Draw your hand and the Teacher's Object as you see them together in the box below.

My Hand
Teacher's Object

7. What has changed? — — — — —



HOW BRIGHT IS BRIGHT?

Follow the instructions that your teacher gives you.
Record your observations.

1. Describe what you see when the flashlight is very close to the paper.
2. Circle your answer. When the paper is an arm's length from the flashlight, the light on the paper is:

brighter dimmer

3. Circle your answer. When the paper is a table length from the flashlight, the light on the paper is:

even brighter even dimmer





DEEP SKY

Look at the picture. Read the text.



This is a picture of space.

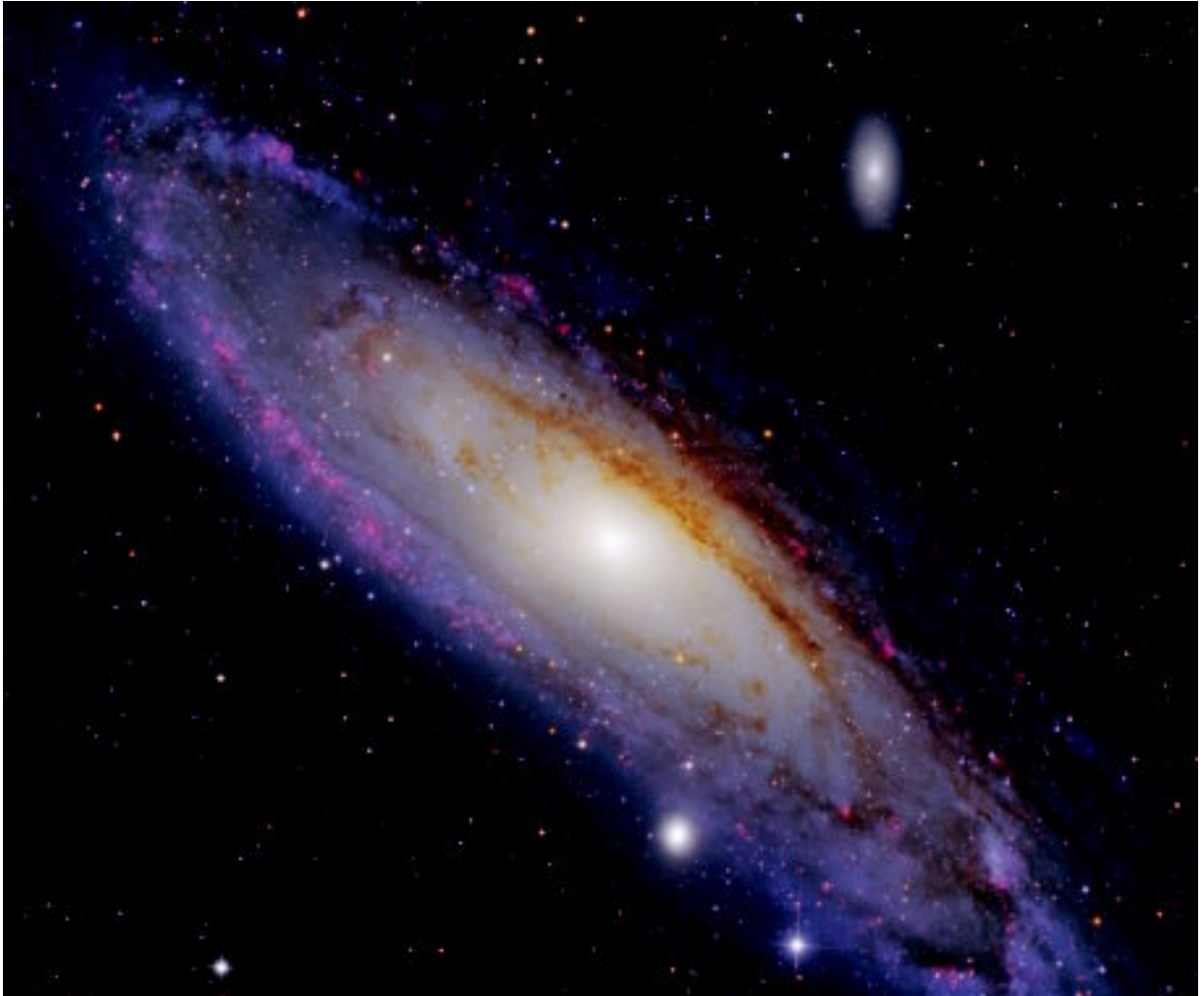
The shapes and dots you see in the picture are not stars. They are galaxies.

Galaxies are where stars exist. Each galaxy contains many, many stars.



SPACE

Look at the pictures. Read the text.



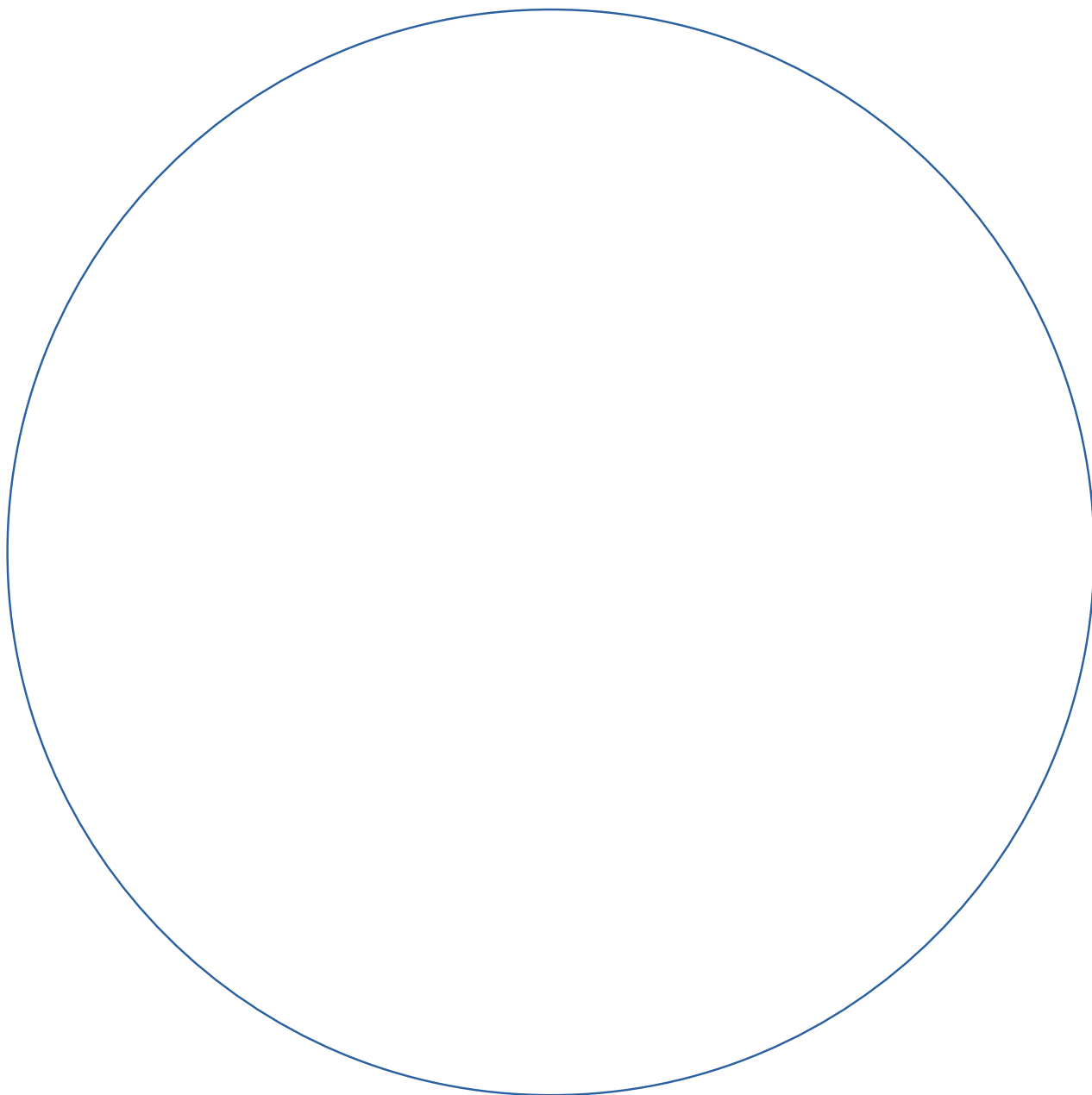
This is a picture of a galaxy. All of the light you see comes from many, many stars. Our sun is in a galaxy like this one.

This picture of a galaxy was taken with a tool called a telescope. A telescope helps us see very dim and far away objects in the sky.



TELESCOPE SKY

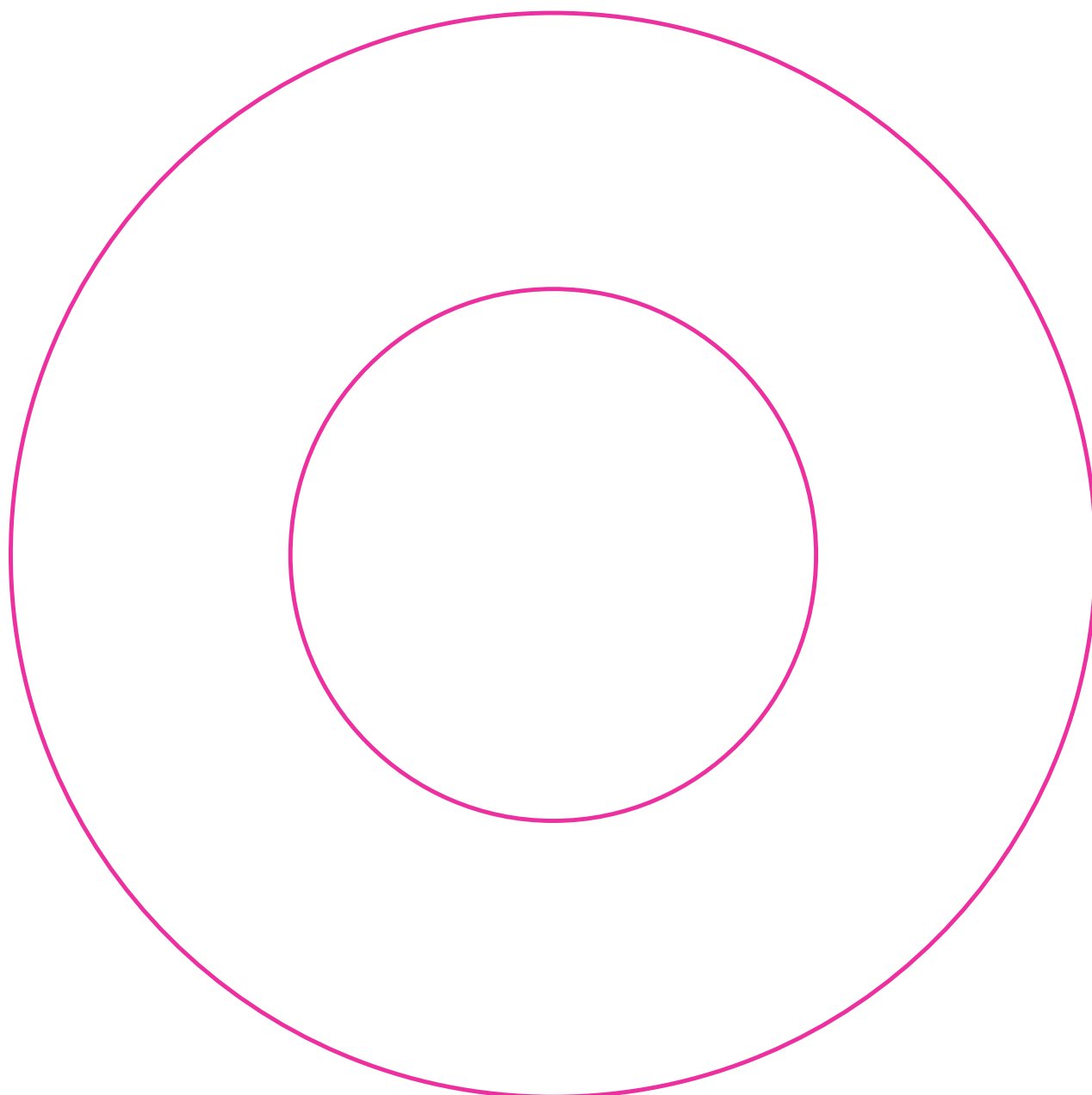
Draw what you imagine the sky over your house could look like if you had telescope eyes.





BRAINSTORMING MY STORY

Brainstorm your ideas. Follow along as your teacher helps you organize your thoughts.



BEGINNING

MIDDLE

END



MY STORY

Write your story. Include a beginning, middle, and end. Give your story a title. Draw an illustration on the next page that helps tell the story.

TITLE



MY PICTURE

Draw a picture to help tell your story.



OUR CONSTELLATION:

Record plans for your group's presentation.

NOTES

What we know:

Questions for research:

TEAMWORK

Responsible for art:

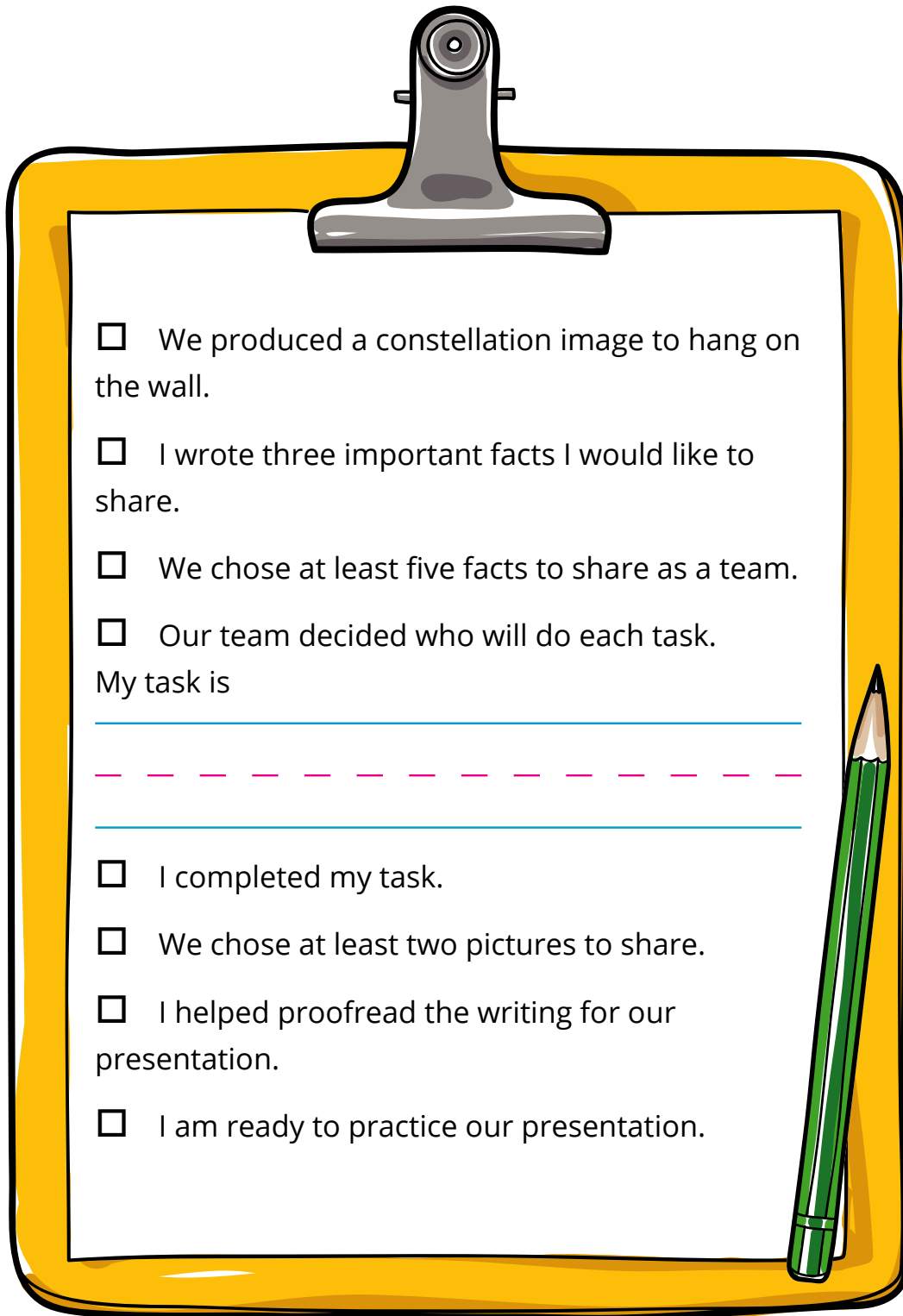
Responsible for labels:

Responsible for information:



MY CHECKLIST

Put a check next to each task as you finish.



- ☐ We produced a constellation image to hang on the wall.
- ☐ I wrote three important facts I would like to share.
- ☐ We chose at least five facts to share as a team.
- ☐ Our team decided who will do each task.

My task is

- ☐ I completed my task.
- ☐ We chose at least two pictures to share.
- ☐ I helped proofread the writing for our presentation.
- ☐ I am ready to practice our presentation.



MY THREE FACTS

Write three important and interesting facts you learned in this chapter.

1.

Handwriting practice lines for the first fact, consisting of a solid blue top line, a dashed pink middle line, and a solid blue bottom line.

2.

Handwriting practice lines for the second fact, consisting of a solid blue top line, a dashed pink middle line, and a solid blue bottom line.

3.

Handwriting practice lines for the third fact, consisting of a solid blue top line, a dashed pink middle line, and a solid blue bottom line.





MY SELF-ASSESSMENT

Read each statement. For each row, color the stars in the box that describes your effort.

	☆	☆☆	☆☆☆
Academic Content	☆ I can share information about the night sky with help from the teacher or a classmate.	☆ ☆ I can share accurate information about the night sky.	☆ ☆ ☆ I can share information about the night sky learned in class and in research.
Quality of Performance	☆ Some of my presentation was clear and organized.	☆ ☆ I spoke clearly and organized the information well.	☆ ☆ ☆ I spoke clearly, used eye contact, and organized the information to increase interest.
Life Skills	☆ I had some trouble cooperating with my group or completing my task.	☆ ☆ I cooperated with my group and completed my task.	☆ ☆ ☆ I was a leader in my group, helping others work cooperatively and complete their tasks.

Rubric Assessment (for teacher use)

	Approaching Expectation (1)	Meeting Expectation (2)	Exceeding Expectation (3)
Academic Content	Describes objects in the night sky in basic terms or with one or more inaccuracies. <i>Science B.1.a. and B.1.b.</i>	Describes objects in the night sky using vocabulary and concepts learned in class (such as variations in size and brightness). <i>Science B.1.a. and B.1.b.</i>	Describes objects in the night sky using vocabulary and concepts learned both in class and through independent research. <i>Science B.1.a. and B.1.b.</i>
	Shares facts learned from informational text but includes inaccurate or misapplied information. <i>F.1.b. and F.8.a</i>	Shares key facts learned from informational text accurately. <i>F.1.b. and F.8.a</i>	Shares key facts learned from informational text and describes relationships between the facts. <i>F.1.b. and F.8.a</i>
	Chooses one or more irrelevant facts or details to share. <i>Speaking and Listening A.2.a.</i>	Chooses appropriate facts and relevant, descriptive details to share. <i>Speaking and Listening A.2.a.</i>	Chooses facts and relevant, descriptive details to share based on the interests of the audience. <i>Speaking and Listening A.2.a.</i>
	Writes complete sentences with help. <i>Writing 1.a.</i>	Writes complete sentences. <i>Writing 1.a.</i>	Writes complete sentences that include above grade-level complexity or vocabulary. <i>Writing 1.a.</i>
Quality of Performance	Speaks to audience members but may be difficult to hear or understand.	Speaks clearly to audience members.	Speaks clearly to audience members with great confidence.
	Creates visuals that are not very neat or are difficult to read.	Creates visuals that are neat and easy to read.	Creates appealing, creative visuals that are neat and easy to read.
Life Skills	Needs help to use a checklist to ensure that all steps of a process have been completed.	Uses a checklist independently to ensure that all steps of a process have been completed.	Uses a checklist independently to ensure that all steps of a process have been completed and helps peers to use the checklist effectively.
	Assesses self using a rubric with help and may have a hard time understanding how to meet expectations.	Assesses self accurately using a rubric.	Assesses self accurately using a rubric and is able to set goals for future work.

HELPING MY HABITAT





THE LAKE

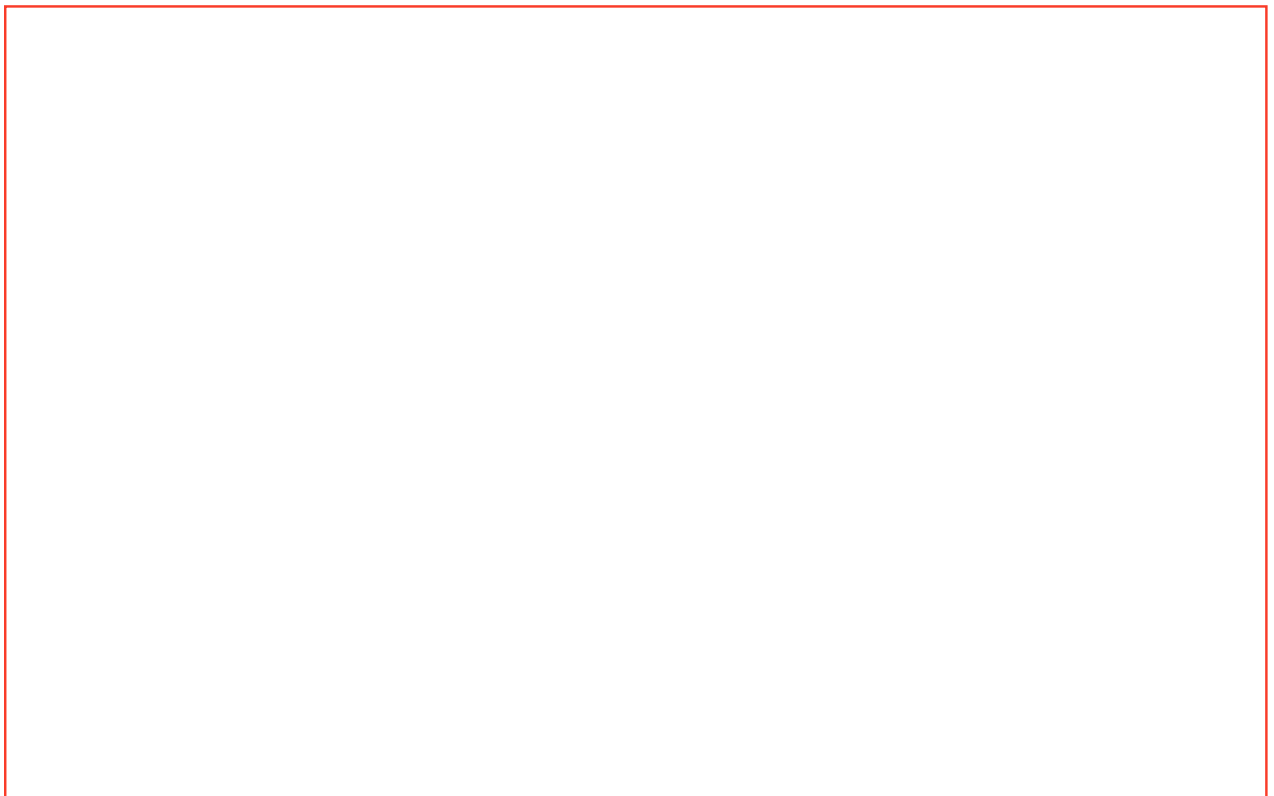
Read the story. Use the description to draw a picture of what you see in your mind.

The lake sits at the base of the mountains. The mountains are covered with large trees.

Some of the trees are hidden in the shadows, making them appear to be dark green. The other trees have dark branches and bright green leaves.

The lake shines blue in the sunlight. The water is still like glass.

Yellow and red flowers bloom in the long grasses along the shore of the lake.





OUR EGYPTIAN ENVIRONMENTS

Compare the different environments. Name each.









VOCABULARY: ENVIRONMENT

Think about your own definition for the new word.
Complete the chart.

Vocabulary Word:

Your Definition	Illustration
Sentence Using the Vocabulary Word	
<div style="border-bottom: 1px solid blue; margin-bottom: 5px;"></div> <div style="border-bottom: 1px dashed pink; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid blue; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid blue; margin-bottom: 5px;"></div> <div style="border-bottom: 1px dashed pink; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid blue; margin-bottom: 5px;"></div>	





IN THE GARDEN

Look at the illustration in the next page. Read the story.
Circle words you do not know.

Nour and Hossam are watering plants in the planter outside Hossam's window. They hear birds singing in the trees. They see bees buzzing around the flowers in the garden.

Hossam finishes watering the plants. There are weeds growing in the planter. Should he pull the weeds out?

The sun is shining brightly. The plants are not in the sun. Nour decides to move the plants to get more sunlight.

Now everyone is happy. The plants are watered, the weeds are gone, and the sun is shining on the plants.

Hossam sees a butterfly fluttering near the plants. He smiles and quietly watches the butterfly.





VOCABULARY: INFER

Think about your own definition for the new word.
Complete the chart.

Vocabulary Word:

Your Definition	Illustration
Sentence Using the Vocabulary Word	
<div style="border-bottom: 1px solid blue; margin-bottom: 5px;"></div> <div style="border-bottom: 1px dashed pink; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid blue; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid blue; margin-bottom: 5px;"></div> <div style="border-bottom: 1px dashed pink; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid blue; margin-bottom: 5px;"></div>	





OUR ENVIRONMENT

Sit quietly. Listen and look around you.
Write or draw what you see.

SCHOOL ENVIRONMENT		
Plants	Animals	Human-made Objects
HOME ENVIRONMENT		
Plants	Animals	Human-made Objects



WHAT IS IN A HABITAT?

Look at the pictures. Write what you see in the box next to each picture.



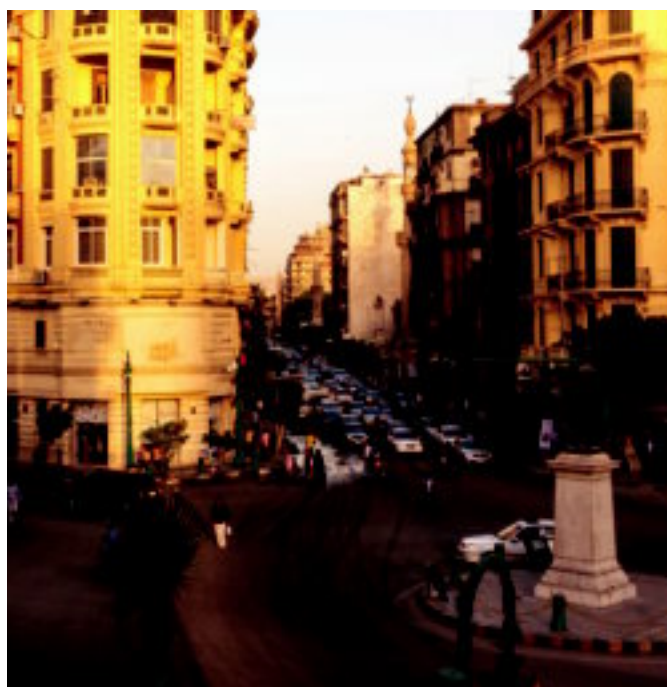
DESERT



OCEAN



FOREST



CITY



VOCABULARY: HABITAT

Think about your own definition for the new word.
Complete the chart.

Vocabulary Word:

Your Definition	Illustration
Sentence Using the Vocabulary Word	





BIRDS OF EGYPT

Read the information below. Think about and discuss the questions.

There are many species of birds in Egypt. Which birds live near you?
In what habitat might the birds live?

The egret is also called the
Farmer's Friend.



The voices of female and male
Egyptian geese are different.

The dove is common to many
parts of Egypt.





HABITATS IN EGYPT

Connect different habitats to the plants and animals that you would expect to find in those habitats. An animal or plant may live in more than one habitat.



bird

tree



beetle

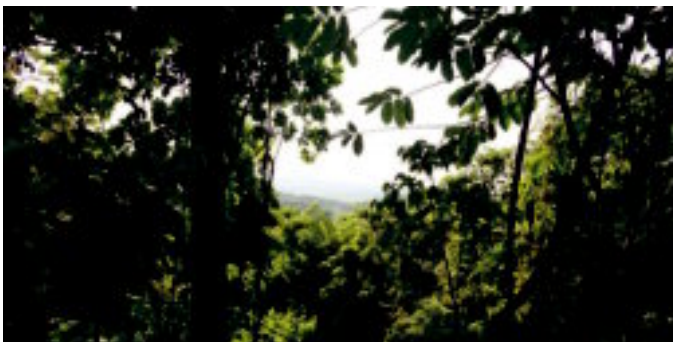
fish

mouse



bumblebee

flower



fox

cat



RESEARCH NOTES

Choose a local animal to research. Write three important facts that will help you in your Share project.

My Animal:

THREE FACTS

I found my information



HUMAN CHANGES

Look at the picture. What do you notice?



Why do humans build dams?

1.

2.

How did the Aswan High Dam change the Nile River? Describe what you see in the picture.



HUMAN IMPACT ON HABITATS

Think about how the Aswan High Dam changed the Nile River and answer the questions below.

1. What do you think the Nile River looked like before the Aswan High Dam was built?

2. Draw a picture of what you think the Nile River habitat was like before Lake Nasser was formed. What plants and animals may have lived there?

3. Draw a picture of how you think the habitat changed after Lake Nasser was formed. What plants and animals may live there now?

**VOCABULARY: STEWARD**

Think about your own definition for the new word.
Complete the chart.

Vocabulary Word:

Your Definition	Illustration
<p>Sentence Using the Vocabulary Word</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	





BEING A GOOD STEWARD

Read the story. Look at the picture. Think about the picture as you read. Circle words you do not know.

Nour and Hossam walk to school. Hossam says, "Today I watered our plants. I must water them often."

Nour thinks about what Hossam said. Then Nour says, "We are learning the engineering design process in school. I will design a product to water the plants for you."

Hossam asks, "How do you do that?"

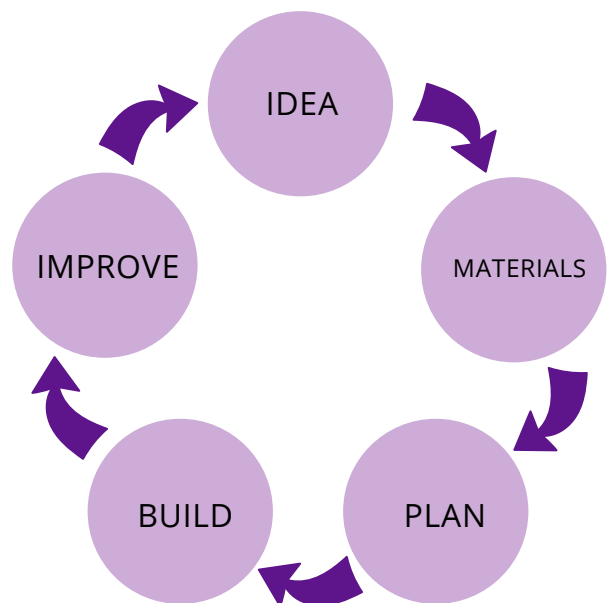
Nour says, "I ask, how can I help water the plants? Then I think of ideas."

"Then what happens?" asks Hossam.

"Then I make a plan. I draw the design. I measure it," Nour says. "Then I build it for you."

"Then I take it home?" Hossam asks.

"Not yet. I do an experiment to make sure it works. I improve it, if I can. Then you can take it home," Nour says, smiling.





Choose a question to research. Record the answers you find.

My question is _____

Now I know _____

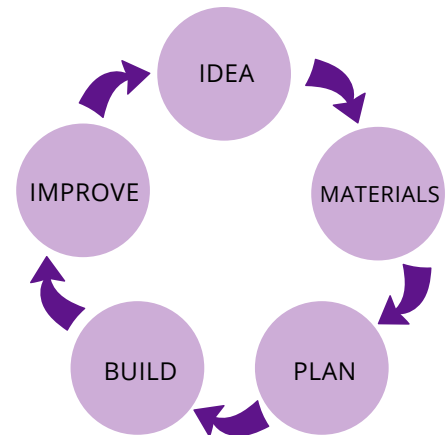
This helps me attract or protect animals because



OUR PROJECT: ENGINEERING DESIGN PROCESS

Refer to the picture. Work with your group to decide what problem you will solve. What you will build?

My name:



Names of people in my group:

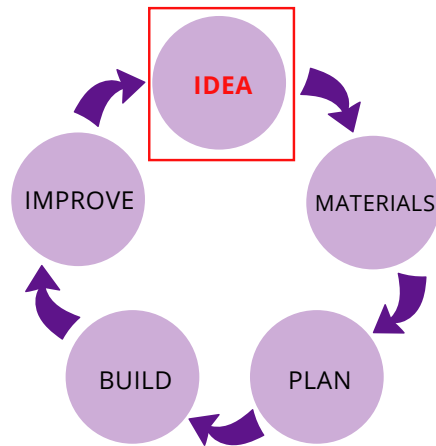
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

What is the problem we will solve?



OUR PROJECT: IDEA

Refer to the picture. List three ideas to solve the problem.



IDEAS

1.

2.

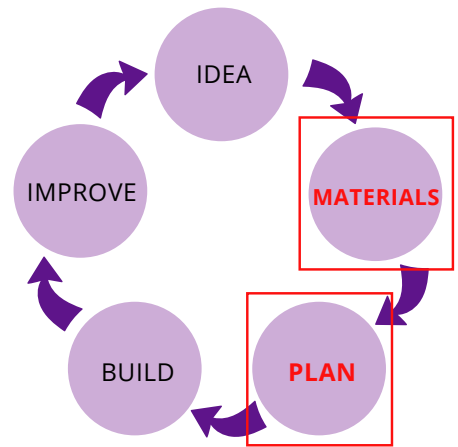
3.

Circle the idea your team decides to build.



OUR PROJECT: MATERIALS & PLAN

Complete the boxes with your ideas.
Work through the engineering design process with your group.



Materials: List materials you will need for your project.

Plan: Draw what you plan to build.
Circle the view you draw.

Front View

Side View

Top View

_____ centimeters tall

Mark on the picture how tall your product will be, in centimeters.



MY PENCIL

Draw your pencil from three different views in the boxes below.

TOP VIEW

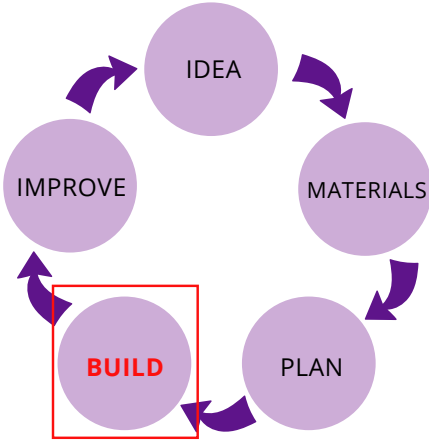
SIDE VIEW

BOTTOM VIEW



OUR PROJECT: BUILD

As you BUILD, you will face challenges. Work with your group to solve them. Record notes below.



CHALLENGES	SOLUTIONS



OUR PROJECT: TEST

Test your product to find out what you can IMPROVE.
Record notes below.

Our product:

1. How will you test your product to make sure it works?
Your process should use a measurement.

2. Test your product:

Measurement 1:

Measurement 2:

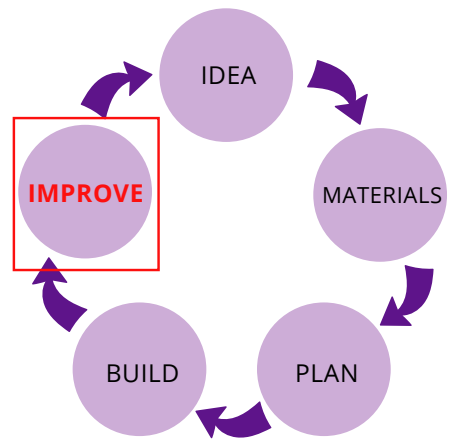
Measurement 3:

Did your product work as planned?

Describe any problems that your product had.



OUR PROJECT: IMPROVE



1. Discuss with your group and another group:
How can your products be improved?

List changes that your group can make that will
improve your product.

2. Make the changes to your product. Test your product again:

Measurement 1:

Measurement 2:

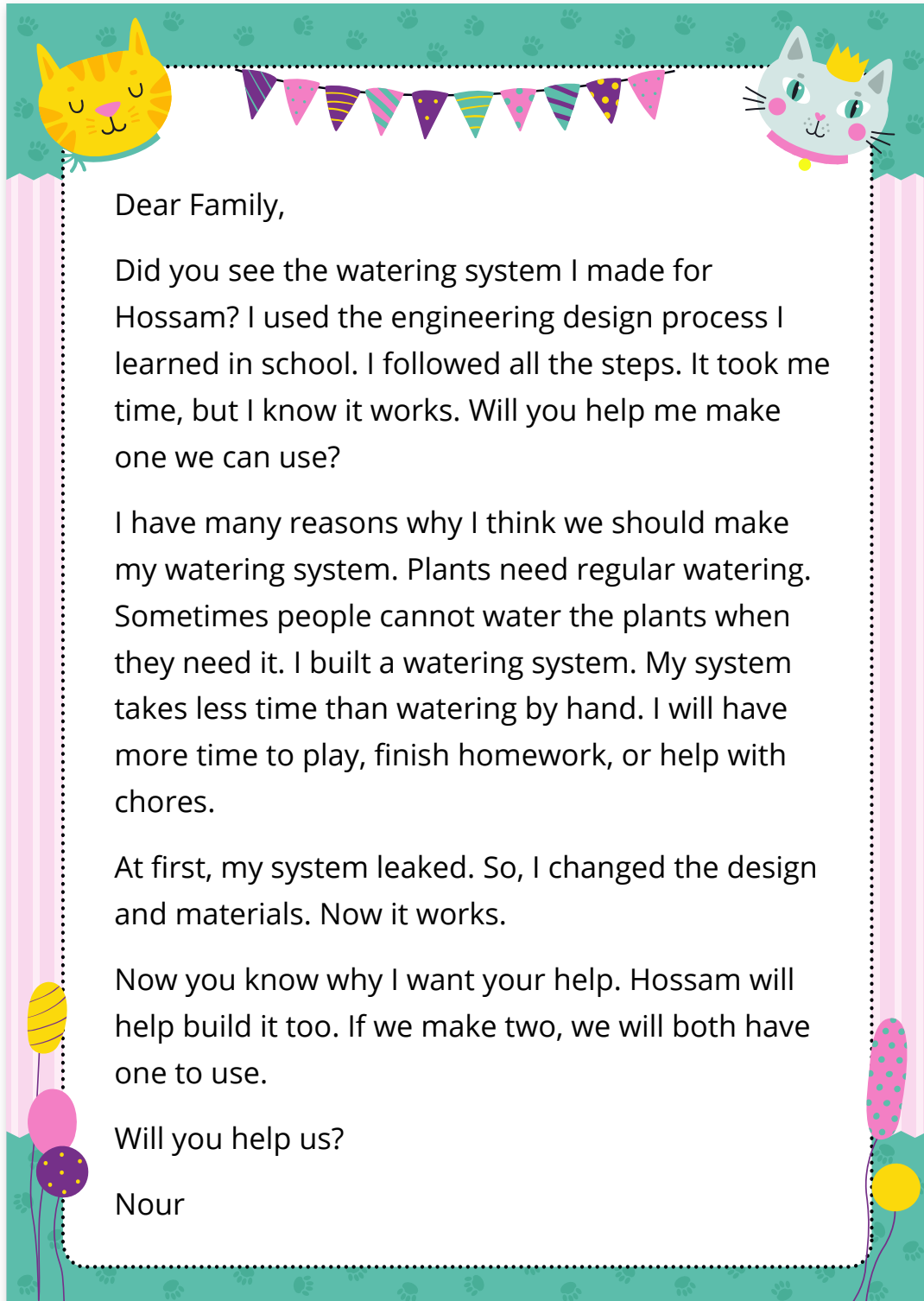
Measurement 3:

3. Has your product improved?



A LETTER FROM NOUR

Read the story. How does Nour persuade her family to help her build a watering system?





VOCABULARY: PERSUADE

Think about your own definition for the new word.
Complete the chart.

Vocabulary Word:

Your Definition	Illustration
<p>Sentence Using the Vocabulary Word</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	





MY PERSUASIVE LETTER

Use the sentence starters to help you write your own persuasive letter.

Dear _____,

I would like help making my product. My product is a

The first reason I want to make it is

The second reason I want to make it is

I need your help because



MY SELF-ASSESSMENT

Read each statement. For each row, color the stars in the box that describes your effort.

	☆	☆☆	☆☆☆
Academic Content	☆ I used the engineering design process with lots of help.	☆ ☆ I used the engineering design process to plan and create a product.	☆ ☆ ☆ I used the engineering design process to plan and create a product. I can describe each stage of the process.
Quality of Performance	☆ I tested my product but had difficulty making changes that improve how well it works.	☆ ☆ I tested my product and came up with a solution that improves how it works.	☆ ☆ ☆ I tested my product and came up with many solutions that improve how it works.
Life Skills	☆ I had some trouble working cooperatively with my group or completing my task.	☆ ☆ I worked cooperatively with my group and completed my task.	☆ ☆ ☆ I was a leader in my group, helping others work cooperatively and complete their tasks.

Rubric Assessment (for teacher use)

	Approaching Expectation (1)	Meeting Expectation (2)	Exceeding Expectation (3)
Academic Content	Describes how a habitat can meet a need of living things using only one example. <i>Science E.1.b.</i>	Describes how a habitat can meet the needs of living things using several examples. <i>Science E.1.b.</i>	Describes how a habitat can meet the needs of living things using a variety of detailed examples. <i>Science E.1.b.</i>
	Describes actions unrelated to being a good steward or without clarifying details. <i>Social Studies A.1.f.</i>	Describes the actions of a good steward with concrete details. <i>Social Studies A.1.f.</i>	Describes the actions of a good steward with several concrete details that show a deeper understanding of stewardship. <i>Social Studies A.1.f.</i>
	Records observations when testing how the product works that are unclear or unrelated to the task. <i>Science: A.1.c, A.1.d.</i>	Records relevant observations when testing how the product works. <i>Science: A.1.c, A.1.d.</i>	Records clear, detailed, and relevant observations as well as thoughtful insights when testing how the product works. <i>Science: A.1.c, A.1.d.</i>
	Explains some of what was learned in research and testing, but the details are incomplete. <i>Science: A.1.g.</i>	Explains in detail what was learned in research and testing. <i>Science: A.1.g.</i>	Explains in clear and concise detail what was learned in research and testing, including how each related to the product. <i>Science: A.1.g.</i>
Quality of Performance	Generates one simple or existing idea to solve a design challenge. <i>Science F.1.e.</i>	Generates two or more original ideas to solve a design challenge. <i>Science F.1.e.</i>	Generates a wide range of original ideas to solve a design challenge in creative ways. <i>Science F.1.e.</i>
	Provides one or no reasons for creating the product in the persuasive letter. <i>Vocational Fields A.4.d.</i>	Provides two clear reasons for creating the product in the persuasive letter. <i>Vocational Fields A.4.d.</i>	Provides two clear, important reasons for creating the product in the persuasive letter. <i>Vocational Fields A.4.d.</i>
Life Skills	Manages or organizes tasks ineffectively, or only with the help of peers or the teacher.	Manages and organizes tasks effectively and independently.	Manages and organizes tasks effectively, also helps to organize peers.
	Offers feedback that is not helpful or does not relate to the plan or product.	Offers feedback to others that helps them improve their plan or product.	Offers insightful feedback to others that helps them improve their plan or product in a meaningful way.

MONUMENTAL DESIGNS





WHO MADE THIS?

Look at the pictures. Decide whether the object in the picture is found in nature or is made by humans. Write “humans” or “nature” in the last column.



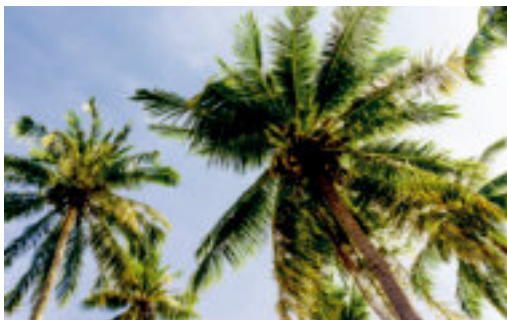
Rocks



Car



Tools



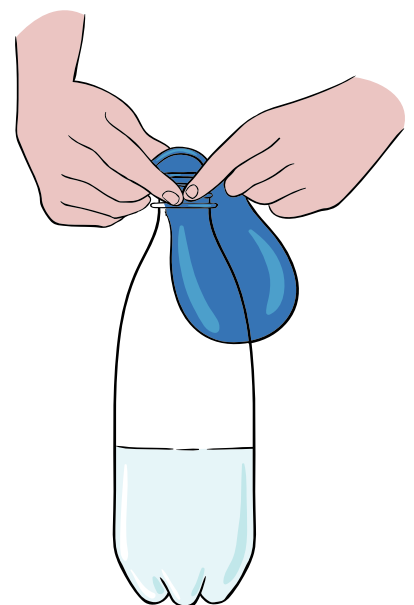
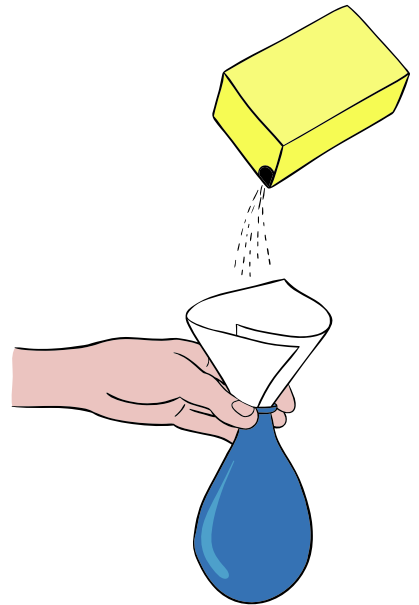
Trees



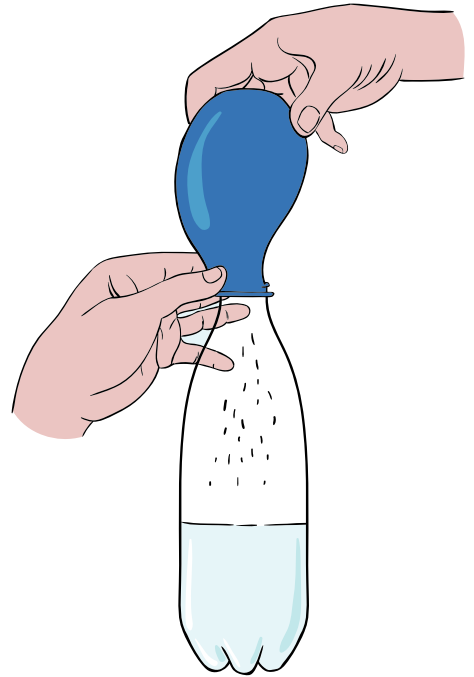
LET'S INFLATE A BALLOON

Read and follow the directions.

1. Inflate the balloon about half way, then slowly let the air out of it. Do this two or three times.
2. Practice putting the balloon over the opening of the bottle. Do this two or three times.
3. Make a funnel out of the piece of paper by rolling it into a cone. This cone is your funnel.
4. Put the small end of the funnel into the balloon opening.
5. Pour the baking soda from the cup into the large end of the funnel so the baking soda flows into the balloon.
6. Attach the balloon to the opening of the bottle, making sure you have a good seal. Let the balloon hang over the side. Do not let the baking soda go into the bottle yet.



7. Lift up the balloon so baking soda falls into the bottle. You may have to wiggle the balloon a little. Once the baking soda is in the bottle, shake the bottle gently from side to side.



Describe what you observed below:

I wonder



WHAT MATERIALS DO WE SEE?

Look closely at the pictures. List the materials you see in the pictures.



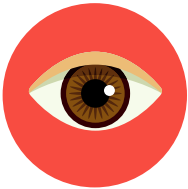










HOW DO WE KNOW?

Answer the question for each sense.

SENSE	WHAT PROPERTIES CAN YOU OBSERVE?
Sight 	
Hearing 	
Smell 	
Touch 	
Taste 	



DESCRIBE OUR WORLD

List five items in the classroom. Describe each item's properties, then record your best guess for the material it is made of.

ITEM	DESCRIPTION	WHAT IT IS MADE OF
1.		
2.		
3.		
4.		
5.		



THREE FORMS OF WATER

Draw lines that connect the words ICE, WATER, and VAPOR/STEAM to the matching pictures and to the correct states of matter (LIQUID, GAS, SOLID).

ICE



LIQUID

WATER



GAS

VAPOR/
STEAM




SOLID





CHANGING FORMS

Decide whether the change requires warming up or cooling down.
Write your answer in the box. Give an example of the change.

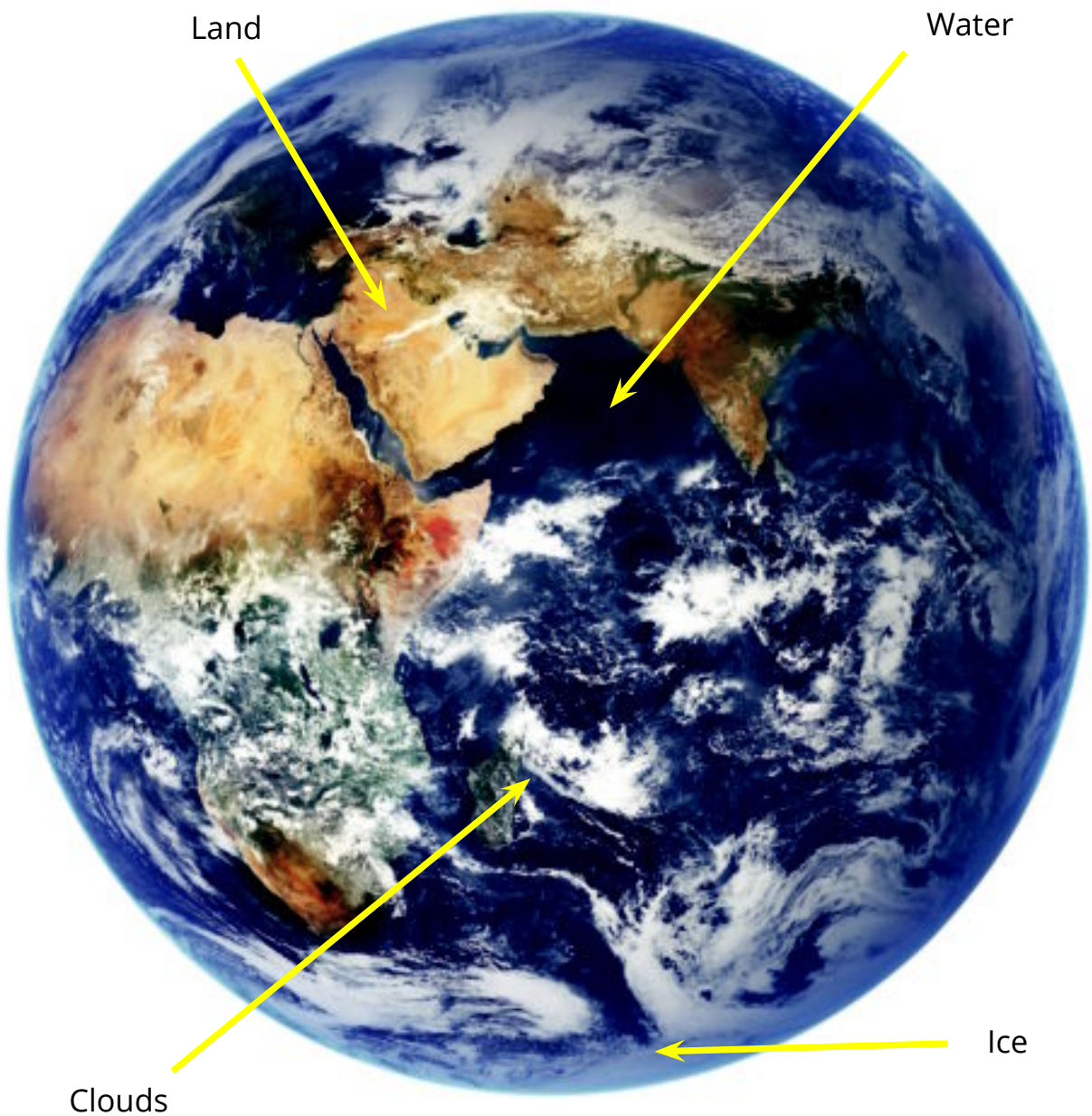
CHANGE	WARM UP OR COOL DOWN?
Solid → Liquid Example:	
Liquid → Solid Example:	
Liquid → Gas Example:	
Gas → Liquid Example: 	



OUR WORLD

Refer to the picture during class discussion.

Planet Earth from space. Can you find Egypt ?





WATER: SOLID, LIQUID, AND GAS

Look at the picture. Read the text. Circle and label the three forms of water using different colored crayons.



This picture was taken in a very cold place on Earth. An iceberg is a very large piece of ice floating in the ocean. Icebergs are often as tall as a six- to ten-story building. The tallest iceberg on record rose nearly 55 stories above the water. Large icebergs are also called ice mountains.

Water can be seen in all three forms in this picture: solid, liquid, and gas.



FRESH WATER

Look at the pictures. Read the text. Answer the questions.



This is a map of Egypt. Point to where you live.

The blue, curvy line running through the country is the Nile River.

What festival do we celebrate each year that involves the Nile River?

The boat is sailing on the Nile River.
The Nile River is fresh water. How do we use the fresh water in the Nile River?



Where does fresh water come from?



EGGS FOR BREAKFAST

Use the images to complete the first two descriptions, then answer the questions below.

Describe the inside of a raw egg.



Describe a cooked egg.



What made the egg change?

Can you reverse the change to make a cooked egg raw again?



FORCES OF NATURE

Look at the pictures. Describe what you see in the pictures that might affect a monument that is built outside.





NOUR AND HOSSAM VISIT A MONUMENT

Read the story with your Shoulder Partner. Circle new words you do not know. Discuss with your partner: What is a monument?

Nour and Hossam ride their bicycles.
They stop at a statue at the park.

“Who is this?” asks Nour.

“There is a sign next to the statue. Let’s find out,” answers Hossam.

Nour and Hossam read the sign. Hossam says, “It says this is a monument. The statue honors the man who started our town. Did you know people made statues to honor someone? I thought statues were just decorations.”



Nour responds, “I have seen buildings that honor people and places like our pyramids. I saw another statue in the park. Let’s go see who that statue honors.”

Nour and Hossam get back on their bicycles. They look forward to sharing what they have learned about monuments with their families.



MONUMENTS OF EGYPT

What observations can you make about the monuments?





MONUMENTS OF EGYPT 2

What observations can you make about the monuments?





REQUEST FOR A NEW MONUMENT

Read the letter and information below. Use the requirements as you build your ideas.

Dear class,

Our town group is planning a new small park. We would like to create a monument in the middle of the park to honor an important local person or event. We need your help in designing the monument. We have provided our requirements below. We look forward to seeing what you can imagine and design.

The monument must:

1. Use at least 2 different materials.
2. Include at least 2 forms of materials: solid, liquid, or gas.
3. Include at least 3 shapes.
4. Showcase 1 pattern.
5. Model must be between 10 and 15 cm tall.

A requirement is something that needs to be true of a design. Requirements guide our design and must be included in planning our monument. Design thinking helps us make sure our ideas meet the expectations of the requester.



IDEAS FOR MY MONUMENT

Brainstorm ideas for your monument. Write as many ideas as you can. Have a light-colored crayon ready to use.

1. Whom will my monument honor?

2. What will my monument look like? Will it be a building, fountain, or statue? Write or draw some examples.



PLANNING MY MONUMENT

Congratulations. You are ready to begin planning. Picture your monument in your mind. Answer the following questions.

1. What shapes will you use to make your monument?

2. What materials will you use?

3. What 2 forms of material will you use? Circle what you will use.

SOLID

LIQUID

GAS



DRAWING MY MONUMENT

Draw your model. What will the monument look like from the front and the back? Think about the requirements:

1. Use at least 2 different materials.
2. Include at least 2 forms of materials: solid, liquid, or gas.
3. Include at least 3 shapes.
4. Showcase 1 pattern.
5. Model must be between 10 and 15 cm tall.

FRONT VIEW

BACK VIEW



VOCABULARY: REQUIREMENT

Read the words. Write a definition and a sentence for each.

Vocabulary Word: _____

Your Definition	Illustration
Sentence Using the Vocabulary Word	
<hr/> <hr style="border-top: 1px dashed;"/> <hr/> <hr/> <hr style="border-top: 1px dashed;"/> <hr/>	

Vocabulary Word: Monument

<p>Your Definition</p>	<p>Illustration</p>
<p>Sentence Using the Vocabulary Word</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	





MY CHECKLIST

Put a check in the box when you have completed each requirement.
Record the name of your monument and your favorite part.

What is the name of your monument?	
<input type="checkbox"/>	REQUIREMENTS
<input type="checkbox"/>	Includes at least 2 of these. Circle what you used: Liquid Solid Gas
<input type="checkbox"/>	Includes 3 shapes. Draw the shapes you used.
<input type="checkbox"/>	Includes at least 1 pattern. Draw the pattern you used.
<input type="checkbox"/>	Between 10 cm and 15 cm tall. How tall is your monument?
What is your favorite part of the monument?	



EGYPTIAN TICKETS

Below are tickets used at monuments in Egypt. Tourists save these tickets to remember places they visit. What do you notice when you look at the tickets?





PUTTING TOGETHER MY IDEAS

Draw your monument. Practice writing the words and numbers for your ticket. Then cut around each section and place on the next page. Move the pieces around to decide where you will put each item. Glue on the page.



DESIGN PLAN

Arrange the objects on the page. Glue the pieces down when you are happy with your design.



TICKET TO

Create your ticket.

A large, empty rectangular box with a black border, intended for a child to draw their ticket design.



REMEMBERING VISITS

Read the story. Why do you think monuments are important to Hossam and Nour?

Hossam and Nour are at Nour's house. They just returned after visiting monuments and the museum in their town.

Nour says, "I really like the tickets we got at the museum. I want to save mine, just like I saved the tickets of the monuments we visited."

Hossam looks at the tickets. "I like this ticket most of all. It reminds me of the fountain I saw outside of the building."



Nour holds up another ticket. "This is my favorite ticket. I learned so much about the history of our town when we visited this monument. When I look at the ticket, it helps me remember."

Hossam puts his tickets in a small box. "I am putting my tickets in a special place. When I visit new places, I will put the tickets in this box. Then I can remember all the special monuments I have visited."



MY SELF-ASSESSMENT

Read each statement. For each row, color the stars in the box that describes your effort.

	☆	☆☆	☆☆☆
Academic Content	☆ I can correctly identify solids, liquids, and gases with help.	☆ ☆ I can correctly identify solids, liquids, and gases.	☆ ☆ ☆ I can correctly identify solids, liquids, and gases that were shared in class and some others that were not.
Quality of Performance	☆ I can create visuals, but they are not very neat or well organized.	☆ ☆ I can create visuals that are neat and well organized.	☆ ☆ ☆ I can create unique visuals that are exceptionally neat and well organized.
Life Skills	☆ I can use a checklist to make sure I include all required elements with help.	☆ ☆ I can independently use a checklist to make sure I include all required elements.	☆ ☆ ☆ I can independently use a checklist to make sure I include all required elements and create checklists for myself for other tasks.

Rubric Assessment (for teacher use)

	Approaching Expectation (1)	Meeting Expectation (2)	Exceeding Expectation (3)
Academic Content	Classifies and describes solids, liquids, and gases with help. <i>Science D.1.b.</i>	Classifies and describes solids, liquids, and gases and gives examples. <i>Science D.1.b.</i>	Classifies and describes solids, liquids, and gases. Offers examples of how materials can change form, such as solid ice melting into liquid. <i>Science D.1.b.</i>
	Produces simple designs that include shapes but has difficulty identifying them correctly by name. <i>Math E.1.c.</i>	Produces designs that include shapes and identifies them correctly by name. <i>Math E.1.c.</i>	Produces complex designs that include newly learned shapes and identifies them correctly by name. <i>Math E.1.c.</i>
	Identifies Islamic and Coptic historic monuments with help but may not be able to explain their importance to Egyptian culture. <i>Social Studies C.2.c.</i>	Identifies Islamic and Coptic historic monuments and explains their importance to Egyptian culture. <i>Social Studies C.2.c.</i>	Identifies Islamic and Coptic historic monuments, explains their history and importance to Egyptian culture. <i>Social Studies C.2.c.</i>
	Uses a checklist to ensure that all requirements have been addressed with help or only partially uses the list. <i>Science F.1.c.</i>	Uses a checklist independently to ensure that all requirements have been addressed. <i>Science F.1.c.</i>	Uses a checklist independently to ensure that all requirements have been addressed and helps peers use the checklist. <i>Science F.1.c.</i>
Quality of Performance	Presents or displays artwork that is not very neat or is difficult to read. <i>Visual Art B.1.a.</i>	Presents or displays artwork with visuals that are neat and easy to read. <i>Visual Art B.1.a.</i>	Presents or displays artwork with appealing visuals that are exceptionally neat and easy to read. <i>Visual Art B.1.a.</i>
	Contributes to discussions about the text only when directly prompted. <i>Reading E.1.a.</i>	Contributes to discussions about the text and asks questions. <i>Reading E.1.a.</i>	Contributes to discussions about the text regularly, offering unique and thoughtful insights and questions. <i>Reading E.1.a.</i>
Life Skills	Offers feedback that is not helpful or does not relate to the plan or product.	Offers feedback to others that helps them improve their plan or product.	Offers insightful feedback to others that helps them improve their plan or product in a meaningful way.
	Manages and organizes tasks effectively, completing them in a timely manner only with the help of peers or the teacher.	Manages and organizes tasks effectively, completing them in a timely manner.	Manages and organizes tasks effectively, completing them in a timely manner. Helps organize peers and leads in this area.

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