



UNITED ARAB EMIRATES  
MINISTRY OF EDUCATION



# Physical and Health Education

Grade 12 Term 1



Authored and designed by  
a specialised committee from the Ministry of Education

# Testing aerobic endurance

## Activity 2

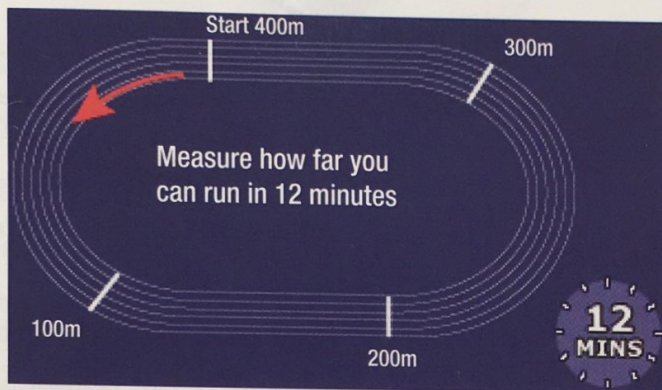
### The 12 minute Cooper run test

Which component of fitness is measured using this test?

AEROBIC ENDURANCE

How could you adapt this test if you do not have a 400m track?

- MAKE ON SMALLER TRACK
- MAKE ON TREADMILL



### FAST FACT:

Aerobic endurance is how the body continuously moves oxygen to the working muscles for long periods of time.

This test is very simple and does not require a lot of equipment:  
400m track/measured area - cones - stopwatch

## Activity 3

You will do this test in your physical education lesson. Write your results in the table below.

Number of laps	Distance

The table below shows normative data values. Circle the category that matches your results.

### Cooper test data

Rating %	Distance (metres)
95	2250
75	1920
50	1700
25	1480
5	<1200



# Testing flexibility



## Activity 4

Flexibility of the hamstring muscle is measured using this test. Which other muscles are used during the test?

BACK MUSCLE  
(TRAPEZIUS)



Use the diagram to provide some key coaching points for this test.

1. Shoe's off. Feet flat on the box.
2. knee straight, locked out to the floor
3. Slowly reach forward as far as you can

You will do this test in your physical education lesson. In groups, you will use the equipment to set up the test and measure and record each other's scores.

Equipment needed: sit and reach box or step/box and ruler

## Activity 5

Write your results in the table below.

Attempt	Distance - cm
1	
2	
3	
Average score	

How do you rate?

Rating %	Distance - cm
95	+21 to +30
75	+11 to +20
50	+1 to +10
25	-7 to 0
5	-15 to -8

## Activity 6

In the table below, give two advantages and disadvantages of the tests we did in today's lesson. Think about their practicality, validity and reliability.

Test	Advantage	Disadvantage
Cooper run	<u>EASY TO DO</u>	<u>AFFECTED BY MOTIVATED</u>
	<u>LARGE GROUPS CAN BE TESTED</u>	<u>PRACTICE REQUIRED</u>
Sit and reach test	<u>EASY TO DO</u>	<u>NOT RELEVANT FOR WHOLE BODY</u>
	<u>QUICK TO PERFORM</u>	<u>VARIATIONS IN ARM/LEG LENGTH,</u>



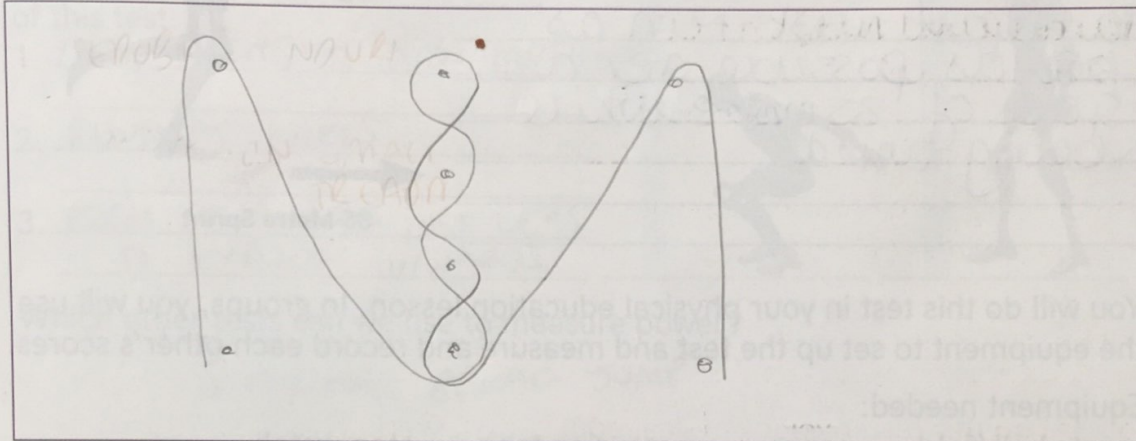
# Testing agility



## Activity 7

### The Illinois agility test

In the box below, draw and label the route of the Illinois agility test.



This test is very simple to do and does not need much equipment. In groups, you are to use the equipment provided and the diagram to set up this test.

Equipment needed:

flat non-slip surface - 8 cones - stopwatch

### FAST FACT

Agility is the ability to change direction at high speed.

## Activity 8

Write your results in the table below and calculate an average score.

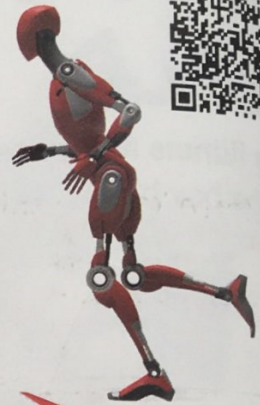
Attempt	Time (secs)
1	
2	
3	
<b>Average score</b>	

How do you rate? Circle the category that matches your results.

Rating %	12-14 years	14-16 years	16-19 years
90	<16	<14.5	<14.2
70	17-17.5	15.5-16.5	14.2-15.1
50	18	17	15.2-17.1
30	18.5-19	17.5-18	17.2-18.3
10	>20	>19	>18.3



# Measuring Speed



35 Metre Sprint

## Activity 9

### 35 metre sprint test

Write a description of the test here.

Participant must run as fast as possible over a space of 35 metre while being timed.

You will do this test in your physical education lesson. In groups, you will use the equipment to set up the test and measure and record each other's scores.

Equipment needed:

- sports hall/field
- cones
- measuring tape
- stop watch

## Activity 10

Write your results in the table below.

Attempt	Time (secs)
1	
2	
3	
Average score	

How do you rate? Circle your category that matches your results.

Rating %	14-19 years
90	<5.30
75	5.30-5.59
50	5.60-5.89
25	5.90-6.20
5	>6.20

Time (seconds)

## Activity 11

In the table, write two advantages and disadvantages of the tests we performed in today's lesson. Think about their practicality, validity and reliability.

Test	Advantage	Disadvantage
Agility test	EASY TO ADMINISTER	SURFACE CAN EFFECT TIME FOOTWEAR CAN EFFECT TIME
	REQUIRE LITTLE EQUIPMENT	
Sprint test	EASY TO ADMINISTER	WEATHER CAN EFFECT TEST. SURFACE CAN EFFECT TIME.
	QUICK TO COMPLETE	



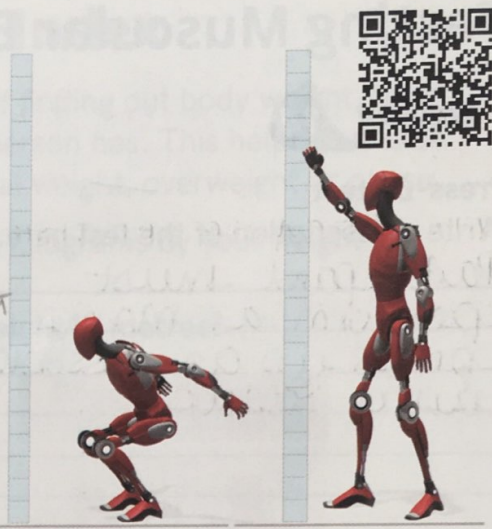
# Measuring Power

## Activity 12

### Vertical jump test

List three key coaching points of this test.

1. USE ARMS TO AID MOVEMENT
2. BEND AT KNEES
3. PUSH DOWNWARDS, USE LEGS TO EXPLODE UPWARDS



Which other tests can we use to measure power?

STANDING BROAD JUMP

You will do this test in your physical education lesson. In groups, you will use the equipment to set up the test and measure and record each other's scores.

Equipment needed: wall - marker/tape - measuring tape or ruler

## Activity 13

Write your results in the table below.

Attempt	Height (cm)
1	
2	
3	
Average score	

How do you rate? Circle the category that matches your results.

Rating %	14-16 years
90	>60
75	51-60
50	41-50
25	35-40
5	<35



### DID YOU KNOW?

Zahra Lari, is the first ever Emirati figure skater. She uses speed and agility to complete her routines on the ice. Which other components of fitness are important to Zahra?



# Testing Muscular Endurance



## Activity 14

### Press-up test

Write a description of the test here.

Participant must perform as many press up as possible until failure.



You will do this test in your physical education lesson. In groups, you will use the equipment to set up the test and measure and record each other's scores.

Equipment needed: non-slip surface

Write your results in the table below.

Attempt	Number of push-ups
1	

### FAST FACT:

Muscular endurance is the ability of a muscle or group of muscles to repeatedly exert force against resistance.

The following table provides normative data for press-ups for males. How do you rate? Circle your category that matches your results.

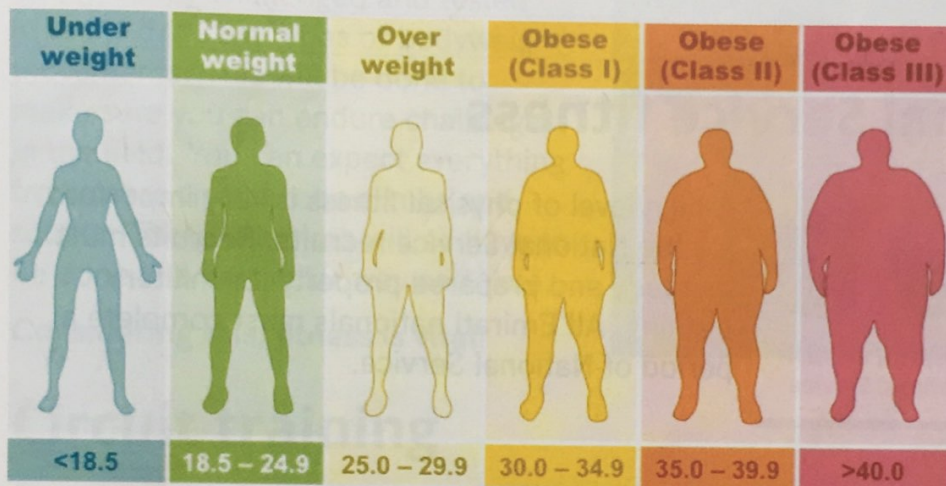
Rating %	14 years	15 years	16 years	17 years
90	22	23	26	28
70	15	17	18	19
50	11	15	15	16
30	6	9	10	12
10	3	4	4	5

# Measuring Body Mass Index

Body Mass Index (BMI) is a different way of finding out body weight. It tries to quantify how much tissue mass a person has. This helps to decide whether that person is underweight, normal weight, overweight or obese.

To find out your BMI, divide your weight in kilograms by your height in metres squared.

$$\text{BMI} = \text{weight in kg} \div \text{height in metres}^2$$



## Activity 15

What is your BMI? You can use a calculator.

weight = \_\_\_\_\_ height = \_\_\_\_\_  
 BMI = \_\_\_\_\_ I fall into this category: \_\_\_\_\_

## Activity 16

In the table below, provide two advantages and disadvantages of the tests we performed in today's lesson. Think about their practicality, validity and reliability.

Test	Advantage	Disadvantage
Vertical jump test	EASY TO ADMINISTER	ONLY MEASURE POWER IN LEGS
	QUICK TO DO	EFFECTED BY FOOTWEAR
Push-up test	EASY TO ADMINISTER	ONLY MEASURE ENDURANCE IN UPPER BODY
	LITTLE EQUIPMENT	EFFECTED BY MOTIVATION





## Activity 17

Do you believe BMI is a good measure of how fit or healthy an individual is? Can you think of any other ways to measure body composition which would be more accurate?

NO BECAUSE IT DOESN'T MEASURE FITNESS.

Body Callipers

## National Service fitness

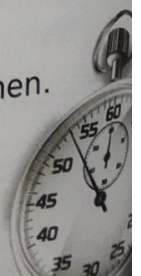


A high level of physical fitness is very important for the National Service recruits. Recruits must be ready and prepared properly for military training. All Emirati nationals must complete a period of National Service.

## National Service criteria

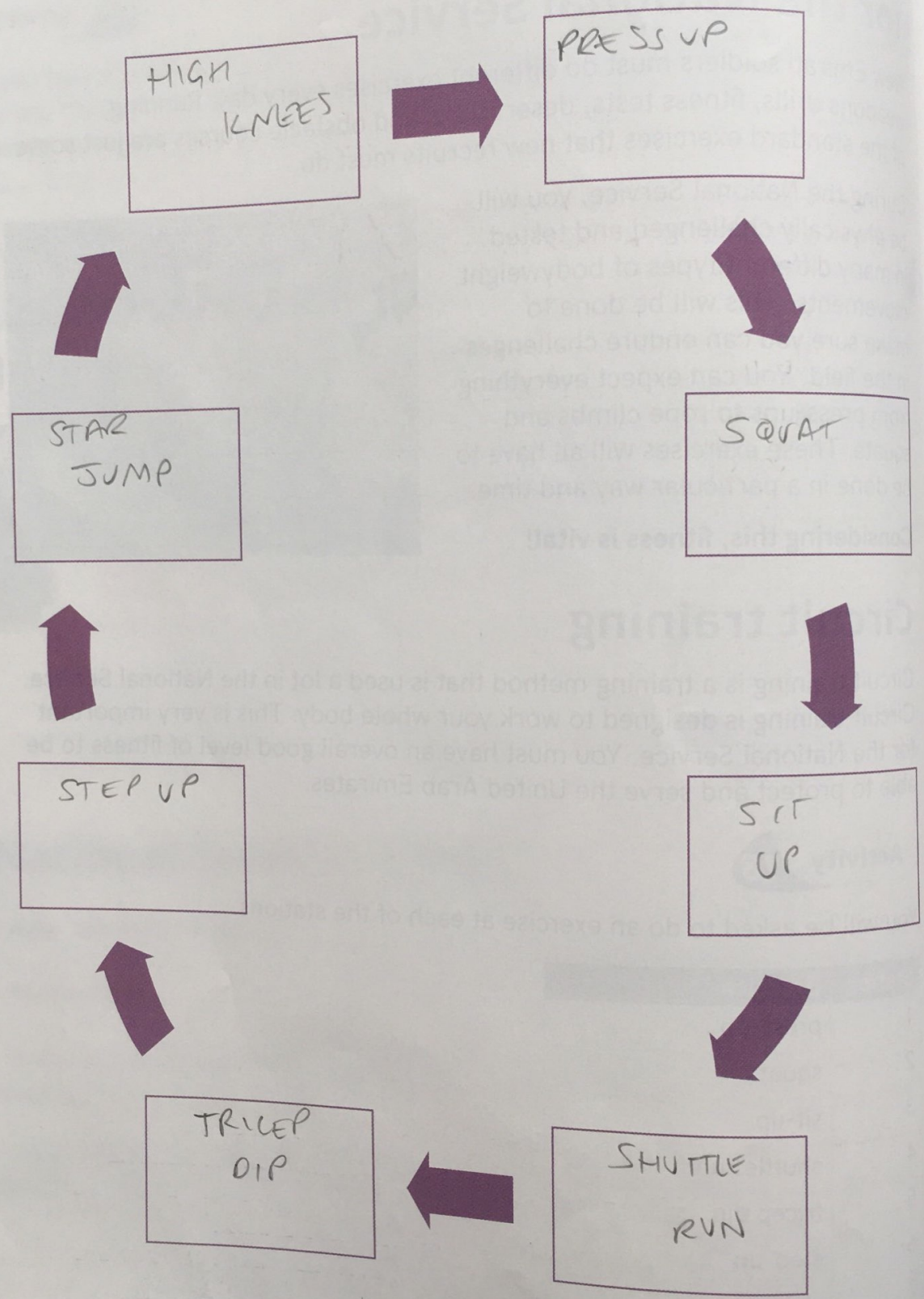
- Aged between 18 and 30
- Medically fit
- A minimum physical fitness level (as determined by National Service requirements)
- Approved by the UAE National and Reserve Service Committee (NRSC) to serve.

As a female, your period of service will be one year.  
This shows how important Physical Education is for young Emirati women.



Complete the diagram with the different exercises performed at each station.

G10  
P.22



## Assessing risk in sport and physical activity

Hazards are anything that can cause us harm in our everyday lives. Hazards can be different and this will depend on the location and nature of the activity.

### Activity 1

What hazards are there in a sports hall? Write your answers in the box below.

- WET FLOOR
- EQUIPMENT ON FLOOR

## Dr ABC

DR ABC is something we use if somebody ever becomes unconscious whilst playing sport. **Being unconscious can happen for different reasons:**

- **head injury:** being hit in the head by equipment or player
- **fainting:** due to over heating or dehydration
- **cardiac arrest (heart attack):** if blood supply is reduced to our heart muscles, the heart can stop working



All the above can be very serious and we must know how to respond if this happens. That is where DR ABC is important.

<b>DANGER</b>	Check there is no further danger - stop play straight away.
<b>RESPONSE</b>	Check for a response - shout their name, tap them lightly on the face.
<b>AIRWAY</b>	Tilt the head backwards by placing one hand on their forehead and supporting the chin with your other hand. This should cause the mouth to open so you can check for any objects that could be blocking the airway.
<b>BREATHING</b>	Lean down and place your cheek by their mouth to feel breath on your face. Look down their body to see if you can see their chest rising and falling.
<b>CIRCULATION</b>	Check for a pulse using two fingers on their neck or wrist.

### Activity 4

When you have followed these rules, what do you think you should do next?

CALL EMERGENCY SERVICES OR FIRST AID





**DID YOU KNOW?**

Amna al Haddad was the first Emirati female to compete in the Reebok Crossfit Games. Crossfit is a high intensity sport which tests an athlete's anaerobic and aerobic capabilities. What risks do you think an athlete may face when competing in Crossfit?

## Soft tissue injuries

If you get a soft tissue injury, like pulling a muscle or twisting your ankle, it is important to follow a method to treat the injury. This method is called the RICE method. This method should be used as soon as possible after the injury happens.

**Activity 5**

Complete the table below to describe each stage of the RICE method?

R	REST
I	ICE
C	COMPRESSION
E	ELEVATION



## Student check-list

I have achieved the following objectives:

- explained the importance of risk assessments
- used the appropriate rating system for risks and hazards
- carried out an in-depth risk assessment in a PE Lesson
- defined sports injuries
- described the DR ABC method
- demonstrated DR ABC
- defined and explained the RICE method