

تم تحميل هذا الملف من موقع المناهج الإماراتية



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* للحصول على أوراق عمل لجميع مواد الصف السابع اضغط هنا [7/ae/com.almanahj//:https](https://almanahj.com/ae/7)

* للحصول على جميع أوراق الصف السابع في مادة تصميم ولجميع الفصول, اضغط هنا [7design/ae/com.almanahj//:https](https://almanahj.com/ae/7design)

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* لتحميل كتب جميع المواد في جميع الفصول للـ الصف السابع اضغط هنا [grade7/ae/com.almanahj//:https](https://almanahj.com/ae/grade7)

للتحدث إلى بوت المناهج على تلغرام: اضغط هنا [bot_almanahj/me.t//:https](https://t.me/bot_almanahj)




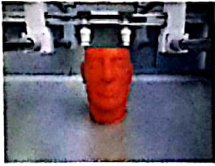



Designers and people around the world are using 3D printing to make their creations real. They are things they can use themselves or are for other people to enjoy.

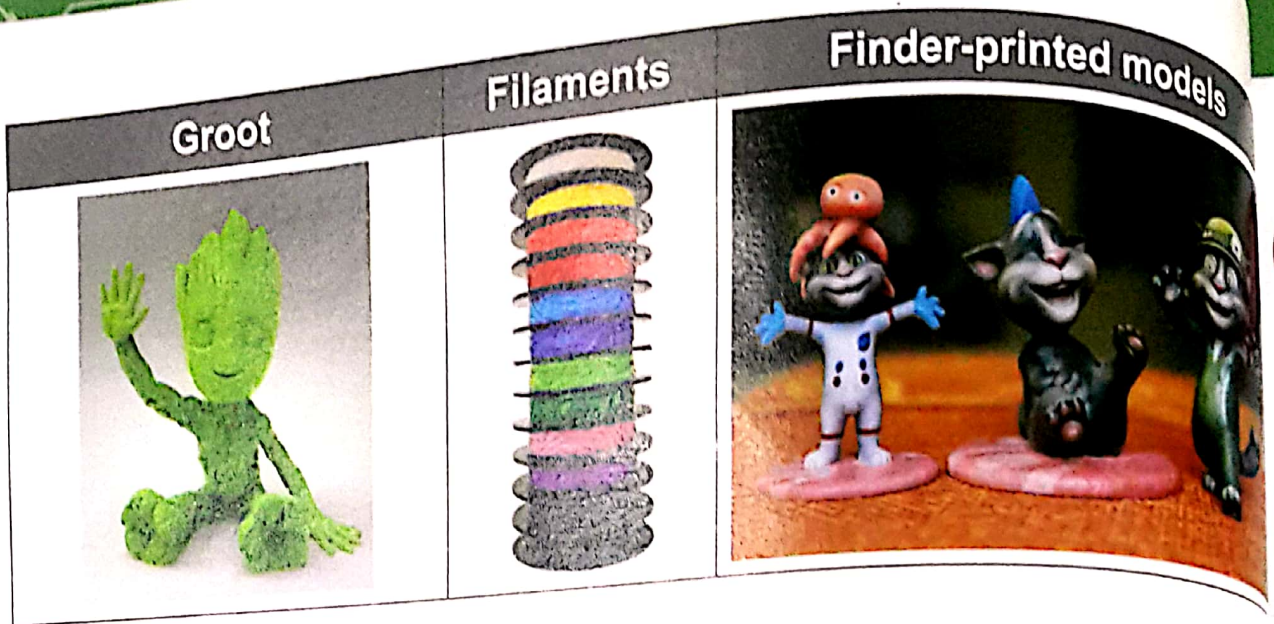


Activity 1



Does the image show Additive or Subtractive manufacturing? Write **Additive** or **Subtractive** next to each image.

	subtractive
	additive
	subtractive المخرقة والمنشرة
	additive الطباعة الثلاثية
	additive



 **Activity 2**



Label the parts of the printer using the words below:

filament	printing platform	heated nozzle
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The diagram shows a 3D printer with a red filament spool on the right. A black heated nozzle is positioned above a blue printing platform. A red object is being printed on the platform. The printer has a white frame and a blue control panel at the bottom. Handwritten labels with arrows point to the filament spool, the heated nozzle, and the printing platform.



Activity 3



Fill in the blank spaces using the words below.

platform	software	desktop	filament	heated nozzle
1. The Flash Forge Finder uses fused deposition modelling which means it uses a plastic string called <u>filament</u> .				
2. FDM is the most common technology used for <u>desktop</u> 3D printers .				
3. The filament goes from a reel to a <u>heated nozzle</u> inside the 3D printer.				
4. The melted filament is laid on the <u>platform</u> as a layer.				
5. The <u>software</u> creates your design from the file you sent to the computer that is connected to the printer.				



Activity 4



Complete each sentence. Tick (✓) the correct answer.

3D printing technology is:

1. moving very slow.	<input type="checkbox"/>
② changing how you design and make everything.	<input type="checkbox"/>
3. not real.	<input checked="" type="checkbox"/>

س
✓

A 3D-printed building in Dubai:

1. cost 538,800 AED and at 100 times more than normal.	<input type="checkbox"/>
2. took 17 days to be printed.	<input type="checkbox"/>
③ is the first 3D-printed office building in the world.	<input type="checkbox"/>

The design process is:

① a way of solving a problem.	<input type="checkbox"/>
2. a paper design of a product.	<input type="checkbox"/>
3. printing 3D objects.	<input type="checkbox"/>

Pop quiz 1

Date

*fused
deposition
modelling*

FDM is:

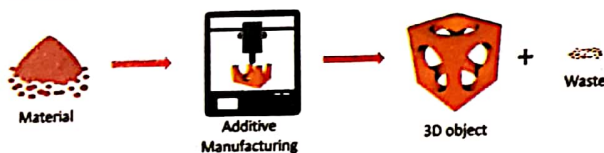
- 1
- A making lots of useful objects quickly and cheaply.
 - B future decomposition process.
 - C format design manufacturing.
 - D front end design manufacturing.
- R.S.*

What is subtractive manufacturing?

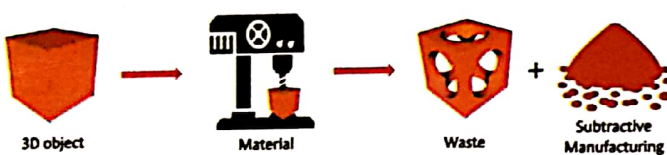
- 2
- A a process which adds material to create an object
 - B building an object when you need it
 - C to take away the manufacturing process
 - D removing material from an object until you have the finished object that you want

Which image shows a subtractive manufacturing process?

A

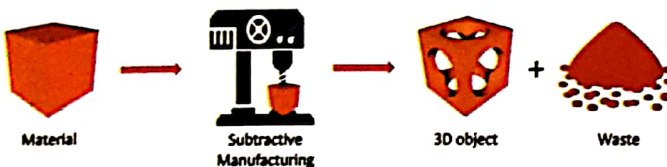


B

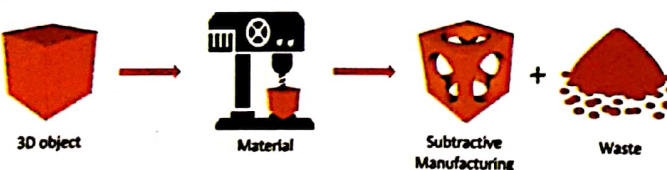


3

C



D




4 The filament is melted, so that it can be:

- A extruded through the nozzle onto a printing platform.
- B extruded through the printing platform onto a nozzle.
- C used for subtractive manufacturing.
- D used as rubbish.

5 A design brief is a written description that:

- A tests the final solution.
- B prints the final solution.
- C shows the final solution.
- D shows the requirements of the final solution.

Evaluation	
Student evaluation	Teacher's evaluation
	/ 5

