

شكراً لتحميلك هذا الملف من موقع المناهج الإماراتية



حل أسئلة الامتحان النهائي الورقي انسباير

[موقع المناهج](#) ⇨ [المناهج الإماراتية](#) ⇨ [الصف التاسع العام](#) ⇨ [علوم](#) ⇨ [الفصل الثاني](#) ⇨ [الملف](#)

تاريخ نشر الملف على موقع المناهج: 16:17:52 2024-03-17

التواصل الاجتماعي بحسب الصف التاسع العام



روابط مواد الصف التاسع العام على تلغرام

[الرياضيات](#)

[اللغة الانجليزية](#)

[اللغة العربية](#)

[التربية الاسلامية](#)

المزيد من الملفات بحسب الصف التاسع العام والمادة علوم في الفصل الثاني

[حل أسئلة الامتحان النهائي الالكتروني انسباير](#)

1

[حل مراجعة عامة وفق الهيكل الوزاري](#)

2

[القوانين المهمة الواردة في الهيكل الوزاري](#)

3

[مراجعة صفحات الكتاب وفق الهيكل الوزاري](#)

4

[تجميع أسئلة صفحات وفق الهيكل الوزاري بريدج](#)

5

Science teacher
Huda Alzyoud

In the figure below two insects are flying over a pond, the **dragonfly** has a mass = 0.7 g and flies at a speed of 36 km/h, and the **ladybug** has a mass = 0.2 g flies at a speed of 60 km/h, answer the following questions.



a. Calculate the momentum for the **dragonfly**.

	Correct answer
a.	Dragonfly momentum = 0.7 g x 36 km/h = 25.2 g.km/h

Momentum = mass *speed

In the figure below two insects are flying over a pond, the **dragonfly** has a mass = 0.7 g and flies at a speed of 36 km/h, and the **ladybug** has a mass = 0.2 g flies at a speed of 60 km/h, answer the following questions.



b. Calculate the momentum for the **ladybug**.

b. **Ladybug** momentum = 0.2 g x 60 km/h

Momentum = mass * speed

= 12 g.km/h

Question

1

In the figure below two insects are flying over a pond, the **dragonfly** has a mass = 0.7 g and flies at a speed of 36 km/h, and the **ladybug** has a mass = 0.2 g flies at a speed of 60 km/h, answer the following questions.



- c. Compare the momentum for the insects using words to describe which one has greater momentum.
-

c.

The **dragonfly** has greater momentum than the **ladybug**,
Or The **ladybug** has smaller momentum than the **dragonfly**

- a. A worker is pushing a lawn mower with a horizontal force of **30 N**, how much work is done when pushing the lawn mower **7 m** to the left?



- b. A student carries **5 kg** books **6 m** to the right, Find the work done by the student?

**a**

$$W = Fd$$

$$W = 30 \text{ N} \times 7 \text{ m}$$

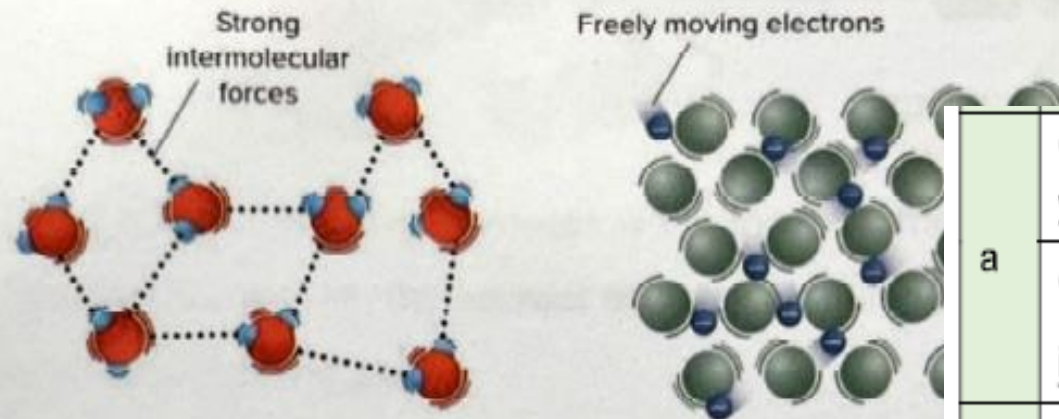
$$W = 210 \text{ N.m} = 210 \text{ J}$$

b

Zero, because the force is perpendicular on displacement

a. What does a coolant means?

b. Use the figure below to compare and contrast, why water is a better coolant than metals?



Coolant is a substance that can absorb a great amount of thermal energy, with little change in temperature

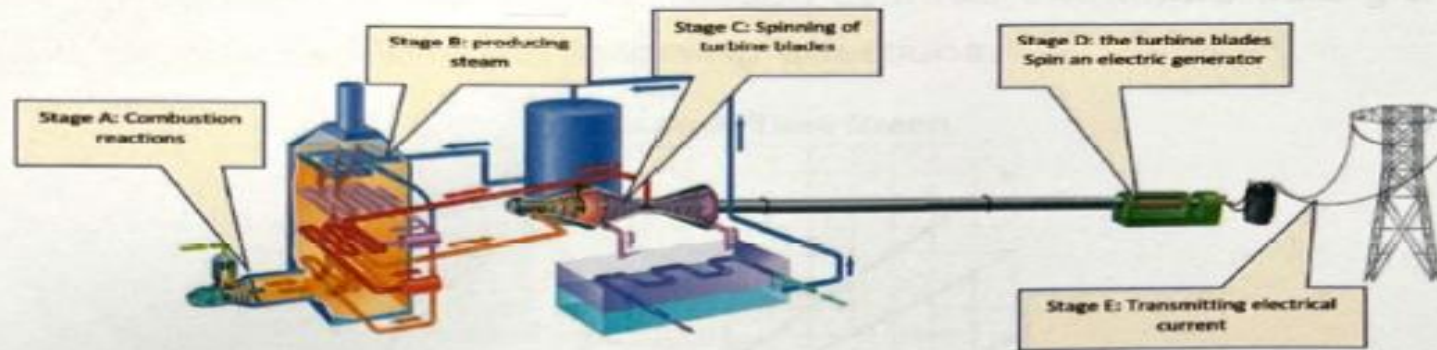
a Or coolant is a liquid that has a high specific heat, its temperature will change a little when heating

Water is a better coolant

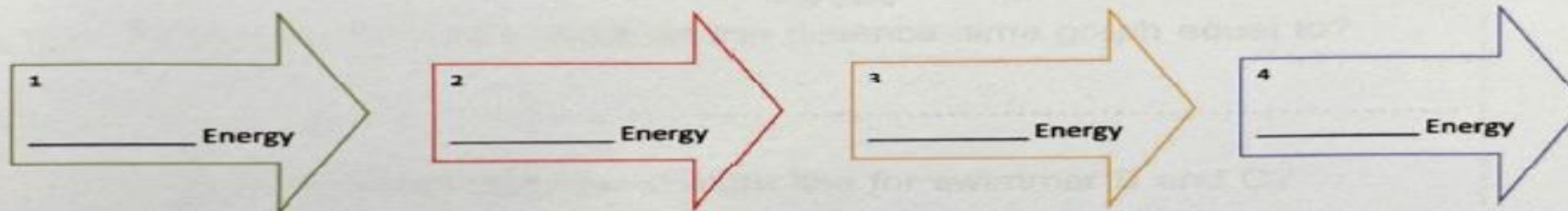
b because when thermal energy is added to water, some of the added thermal energy has to overcome some of the attraction between the molecule before those molecules can start moving faster.

While in metals, electrons can move freely. When thermal energy is added, no strong attractions need to overcome before the electrons can start to move faster.

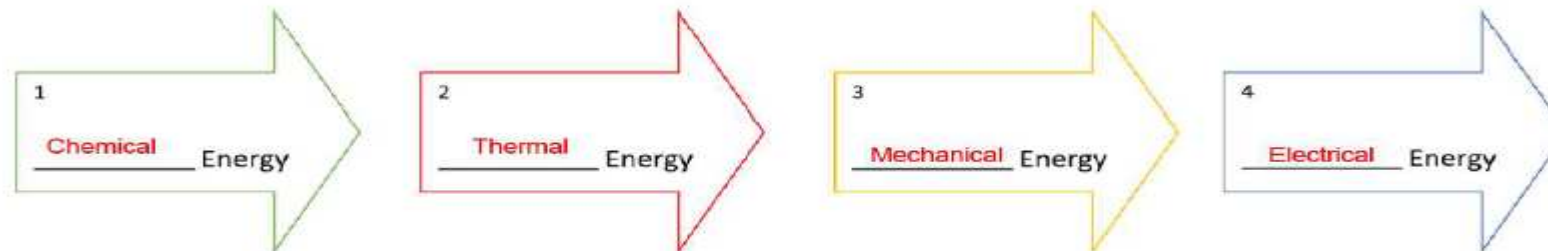
Use the figure of a power plant below to answer the following questions.



- Which stage in the above process is the **most inefficient**?.....
- Fill in the blanks with the **correct sequence** of energy transformation in the above power plant.



- Stage **A**: Combustion reaction(1 mark)
1. Chemical 2. Thermal 3. Mechanical 4. Electrical ... (marks earned if in correct order, 1 mark per each, see diagram)



Several days after a snowfall, the roofs of some homes on a street have almost no snow on them, while the roofs of other homes are still snow-covered as seen in the figure below.



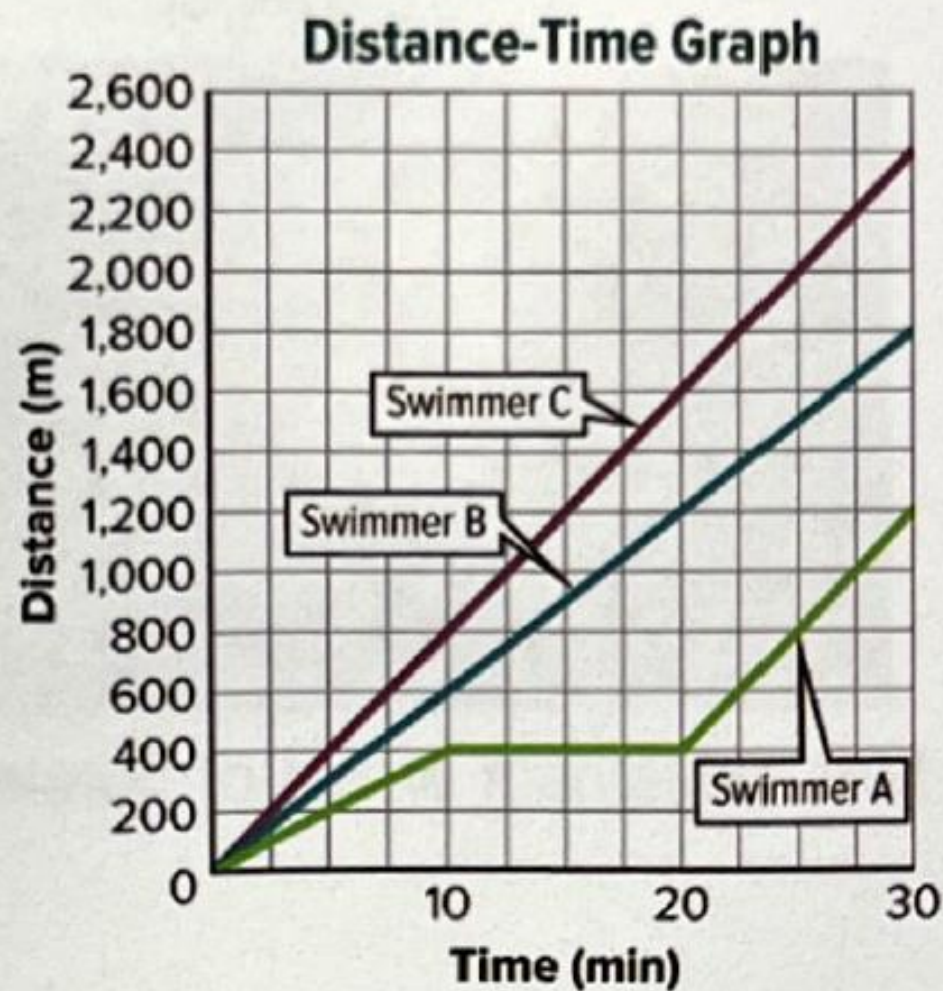
- a. Give one reason, related to home insulation, that might cause this difference.

a. insulated building, some of the houses or building have high insulation, or material that are thermal insulators, that helps prevent thermal energy transfers out of the buildings in cold or snowy weather, these materials reduce thermal energy transfers between the structure and the surrounding air (1 mark) [NOTE: one reason is considered correct or anything relevant to the correct answer]

b. Fill the following table to compare between passive solar heating with active solar heating.

According to:	Passive solar heating	Active solar heating	
Usage of a <u>pump</u>	b.		
Usage of a <u>solar collector</u>	According to:	Passive solar heating	Active solar heating
Thermal energy is stored in.....	Usage of a <u>pump</u>	No pump	Yes pump, circulates the hot fluid to radiators in rooms of the house.
	Usage of a <u>solar collector</u>	No solar collector	Yes solar collector, transforms radiant energy from the Sun into thermal energy.
	Thermal energy is stored in.....	Materials in the room (wood, glass,...)	Fluid: water or air that circulate to radiators in rooms

Study the graph below that shows the motion of three swimmers during a 30-min workout, then answer the following questions:



a. What does the line's slope on the distance–time graph equal to?

.....

b. What is indicated from the straight line for swimmer B and C?

.....

c. How long did swimmer A stop swimming for (the resting interval)?

.....

d. Which one of the following three swimmers had the highest average speed over the 30–min time interval?

.....

e. What is the distance swimmer B swam through the 30–min workout?

	Correct answer
a	The line's slope is equal to the speed
b	it indicates that swimmer b, c swim at <u>constant speed</u>
c	in the interval 10 – 20 min
d	swimmer C,
e	1800 m