



## 5th Grade Science Summer packet- [QPPTKKCZXQ]

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Score: \_\_\_\_\_

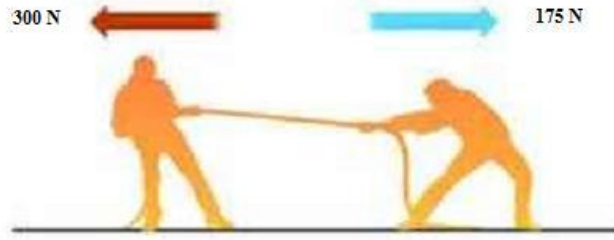
Date: \_\_\_\_\_

**Question 1 : 89469**

Trail mix is just that - a mix. Or in science terms, it is a *mixture*. One way you can tell this is a *mixture* is that you can

- |   |  |
|---|--|
| A | eat all the parts.                           |
| B | measure the amounts of the parts.            |
| C | separate the parts by their properties.      |
| D | identify the parts that make up the mixture. |

**Question 2 : 70137**



The image above shows two opposite forces acting on a rope, what can we say is true about the effect of the forces on the rope?

- |   |   |
|---|---|
| A | It cannot be determined without knowing which man is stronger.              |
| B | It cannot be determined because one man is standing taller than the other.  |
| C | The forces are unbalanced, and net force on the rope moves it to the left.  |
| D | The forces are unbalanced, and net force on the rope moves it to the right. |

### Question 3 : 623884

\_\_\_\_\_ have a definite shape, mass, and volume. They are made up of tiny particles called atoms. The atoms are packed very closely together.

Which word belongs in the blank above?

- |   |         |
|---|---------|
| A | Solids  |
| B | Liquids |
| C | Gases   |
| D | Magnets |

**Question 4 : 2025917**

Which of the following are examples of mixtures that maintain the physical properties of their substances? Choose THREE correct answers.

A	iron filings and sand
B	salt and water
C	lemon juice, water and sugar
D	vinegar and baking soda
E	oil and water

 This question requires at least 3 answers.

**Question 5 : 406869**

Barzi poured two tablespoons of salt into a three cup glass of water. She timed the amount of time it took for the water to completely dissolve the salt.

What could Barzi do during her second attempt to make the salt dissolve faster in the water?

A	use a plastic cup
B	use a four cup glass
C	make the water hotter
D	increase the amount of salt

**Question 6 : 54259**

The fact that you can measure the volume of room temperature water with a beaker is a clue that room temperature water is in liquid form. If you keep raising the temperature of that water, it will

eventually begin to boil, bubbling up and releasing steam.

The steam is an example of

- |   |                        |
|---|------------------------|
| A | a gas.                 |
| B | a solid.               |
| C | a liquid.              |
| D | a super-heated liquid. |

**Question 7 : 309237**

Mrs. Kelly is going to demonstrate a chemical change using an egg for her science class. What can she do to the egg to show a *chemical change*?

- |   |                                      |
|---|--------------------------------------|
| A | crack and open the egg's shell       |
| B | cook the egg on an electric burner   |
| C | separate the yolk from the egg white |
| D | stir the egg white and yolk together |

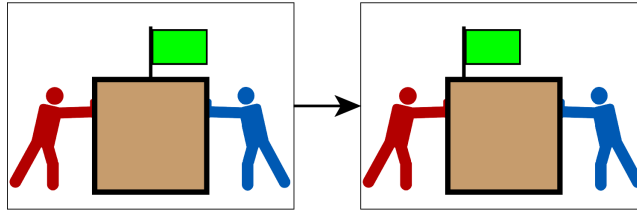
**Question 8 : 623988**

Balanced forces \_\_\_\_\_ cause a change in motion.

- |   |           |
|---|-----------|
| A | do not    |
| B | do        |
| C | sometimes |

D always

**Question 9 : 475219**



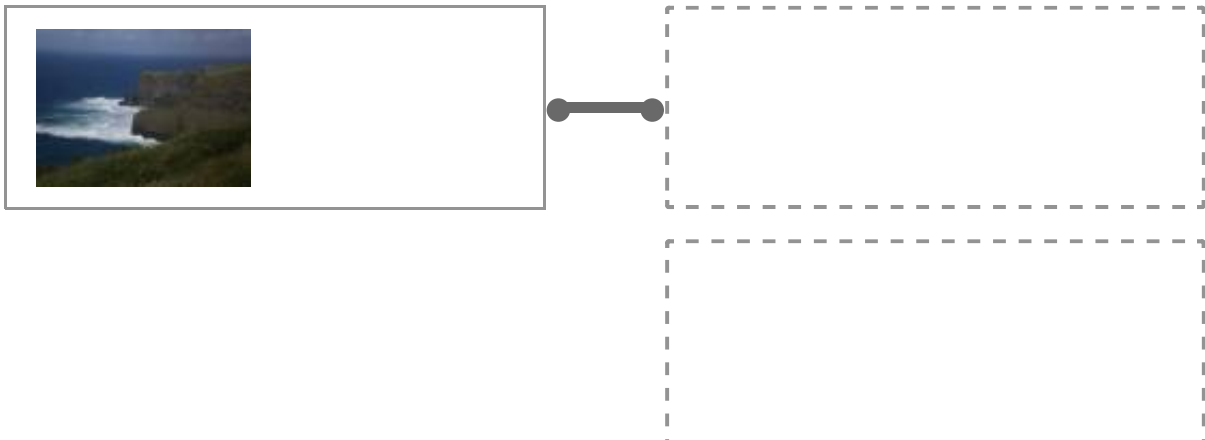
Both the red stickman and blue stickman are pushing the box in front of a flagpole. What is this diagram showing?

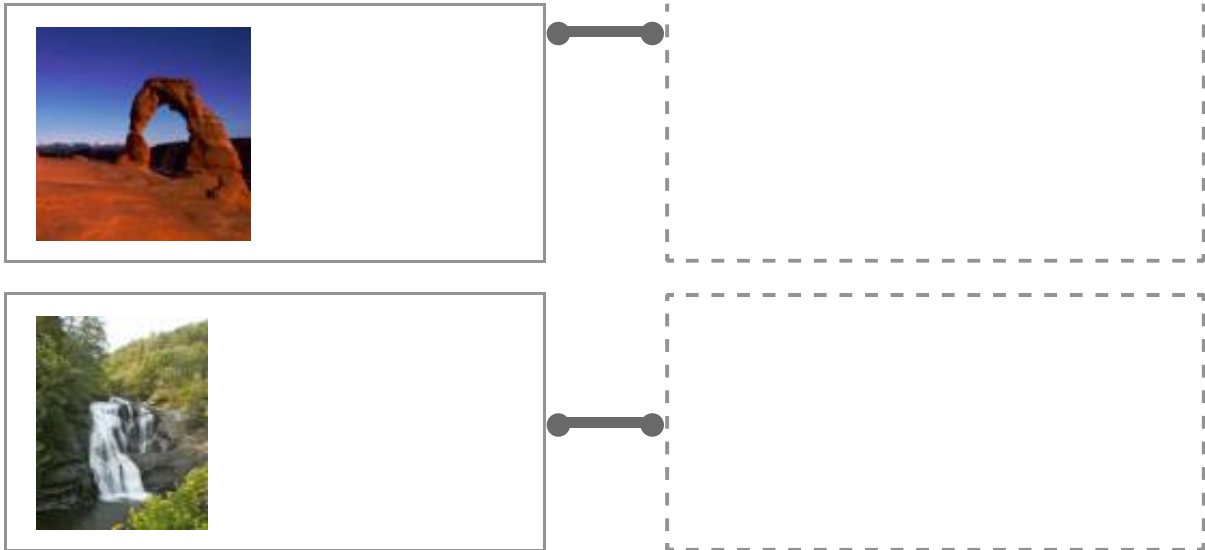
- A The red stickman is applying more force.
- B The blue stickman is applying more force.
- C The force applied on the box is balanced.
- D They are both applying the same amount of force.

**Question 10 : 1512107**

Match the land form with the type of erosion that most likely created it.

**Erosion** is the process that helps to breakdown the continents and the landforms around you. Can you identify the type of erosion at work in certain situations?




 Wind

 Water and gravity

 Wave action

### Question 11 : 20534

The MAIN difference between terrestrial planets and gas giants is

- |   |                              |
|---|------------------------------|
| A | the way they were formed.    |
| B | the shape of their orbits.   |
| C | the level of their density.  |
| D | the plane in which they lie. |

### Question 12 : 167394



This biome can be covered with freshwater, saltwater, or a combination of both. The temperature is mostly moderate between December and April, with some cold fronts. Summers are hot and humid and afternoon rainstorms are common.

Which biome's weather BEST matches this description?

A	swamp biome
B	desert biome
C	tundra biome
D	mountain biome

**Question 13** : 48900



Building a dam to produce hydroelectric power is one way to take advantage of a common renewable resource. This produces much less pollution than a coal burning plant. However, building dams is not a perfect solution.

What is one problem related to dams?

- |   |  |
|---|--|
| A | Dams do not produce enough electricity.                              |
| B | Building a dam will disrupt the local ecosystem.                     |
| C | There are not enough rivers that are strong enough to support a dam. |
| D | They produce more pollution than many other sources of energy.       |

**Question 14 : 76940**



Solar energy causes water to evaporate into the atmosphere. How does that water vapor become a cloud?

- |   |  |
|---|--|
| A | As the water vapor goes higher in the sky, the air gets cooler. The cooler air causes the water vapor to condense. |
| B | As the water vapor goes higher in the sky, solar energy causes it to condense around particles of dust.            |

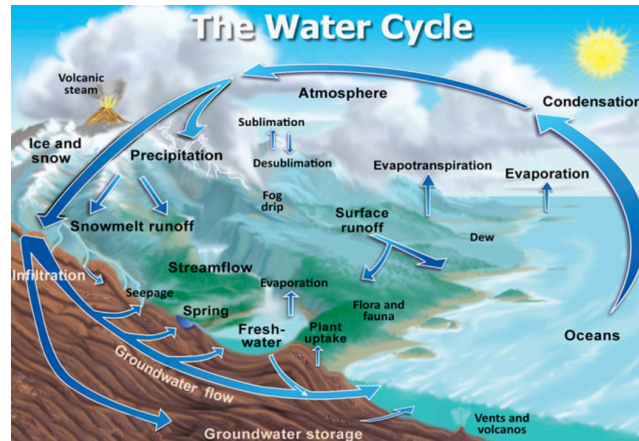
C

As the water vapor goes higher in the sky, the air gets warmer and the water vapor begins to condense.

D

As the water vapor goes high into the atmosphere it turns to ice and that's what forms clouds.

### Question 15 : 76935



In order for water to collect in Earth's atmosphere and form clouds, it must **first** undergo what process?

A

condensation

B

convection

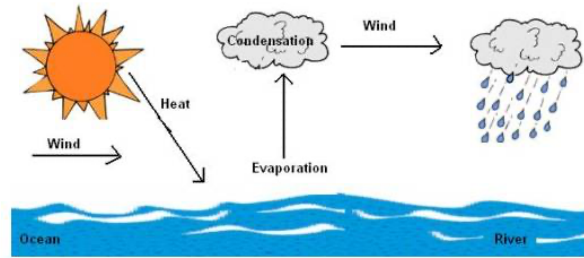
C

evaporation

D

precipitation

### Question 16 : 55525



Planet Earth is called the *blue planet* because it has so much water. Water drives the weather on Earth. What is the energy source that drives the water cycle and gives us weather on Earth?

- |   |                             |
|---|-----------------------------|
| A | ocean tides                 |
| B | energy from the Sun         |
| C | energy inside of Earth      |
| D | winds in Earth's atmosphere |

**Question 17** : 22341

Characteristics
Sometimes called a "dirty snowball"
Has a hydrogen cloud
Has a coma and a nucleus
Invisible except when near the Sun

This is a description of a(n)

- |   |           |
|---|-----------|
| A | asteroid. |
|---|-----------|

B	comet.
C	meteor.
D	star.

**Question 18 : 151831**

Elena lives in Daytona Beach, FL and has been watching the weather forecast for days. A hurricane is headed their way in the next 24 hours. What product will BEST protect their home from hurricane force winds?

A	sandbags
B	blankets
C	first aid kit
D	hurricane shutters

**Question 19 : 623817**

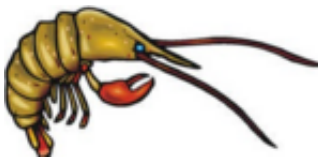
Four structures are shown below.



Skeleton



Snail Shell



Exoskeleton



Plant Stem

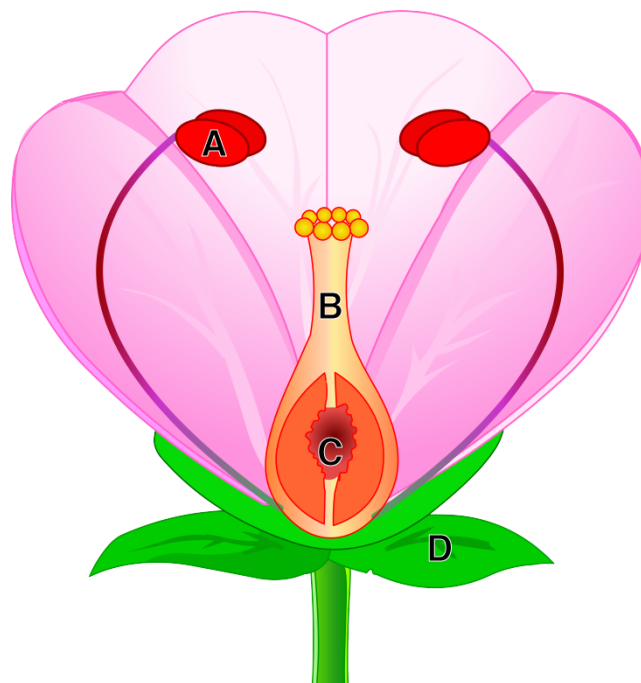
How are the functions of these structures different?

**(choose 3)**

A	Only the snail shell doubles as a home and shelter
B	Only the plant stem cannot move
C	Only the exoskeleton contains food storage for the organism
D	Only the skeleton protect the organism's internal structures
E	Only the skeleton is located inside the organism

**i** This question requires at least 3 answers.

**Question 20 : 525371**



Identify the part of the flower that receives pollen from another flower and uses it to start creating seeds.

A	A
B	B
C	C
D	D

**Question 21 : 52944**



Sea turtles are found in the waters of Georgia. Building on the coast has destroyed their nesting sites. How will this MOST LIKELY affect the sea turtles usually found on the Georgia coast?

A	The turtles will begin laying more eggs.
B	The turtles will build nests in other places.
C	The turtles will no longer be found in Georgia.
D	This will not affect the number of turtles in Georgia.

**Question 22 : 52973**

Seeds  $\Rightarrow$  Mouse  $\Rightarrow$  Hawk

A mouse eats acorns and seeds on the ground. Then, a hawk eats the mouse. What is the hawk's role in this food chain?

A	consumer
B	decomposer
C	herbivore
D	producer

**Question 23 : 50637**

Partulina snails were once found throughout Hawaii. There are no longer any Partulina snails in existence. What factor may have led to the snails extinction?

A	increased building on the islands
B	an increase in its food source
C	developing thicker shells
D	hurricane season

**Question 24 : 71393**



Your skin is an important organ and has several functions. All of the functions below are performed by the skin EXCEPT

A	makes vitamin D.
B	prevents dehydration.
C	maintains body temperature.
D	works with bones to help you move.

**Question 25 : 88420**

Last year a tornado destroyed many trees in the forest. A few brown bears have been seen in a small town near where the tornado occurred. The brown bears have been seen in the town because

A	someone is keeping them as a pets.
B	someone is feeding the brown bears.
C	the circus brought the brown bears to town.

D the tornado destroyed the berries bears eat.

### Question 26 : 110550

Mr. Johnson challenged his students to see which group could dissolve salt the fastest in 100 ml of water. The students could change any variable(s) except the volume of water used. Group 1 changed the water temperature. They used tap water at 22°C and then three other temperatures: 32, 42, and 52 °C. They did not stir the mixture and they kept the volume of the water constant, just like Mr. Johnson directed. The salt dissolved fastest in the warmest water: the times for dissolving were:

22°C-3 minutes

32°C-2.25 minutes

42°C-2 minutes

52°C-1 minutes

Group 2 wanted to beat Group 1 and dissolve the salt faster. What advise would you give Group 2 so they could dissolve the salt in less than 1 minute while still conducting a fair test?

A Use less salt and more water.

B Stir the water instead of heating it.

C Heat the water hotter than 52°C.

D Heat the water to 52°C and stir the solution as the salt is added.

### Question 27 : 114320

#### Tortoise and the Hare

Time (minutes)	Tortoise - Distance traveled (meters)	Hare - Distance traveled
0	0	0
1	1	25

2	2	50
3	3	50
4	4	75
5	5	100

The table shows data concerning the race between the tortoise and the hare.

Based on the data in the chart, what is the **best** conclusion that can be made about the race?

A	the turtle won the race
B	the rabbit won the race
C	the rabbit is much faster than the turtle
D	the turtle is much faster than the rabbit

### Question 28 : 77248

#### Hand Washing Test

Treatment	Bacterial cultures (#/plate)
Warm water	24
Hand sanitizer	28
Soap A	12
Soap B	13

How reliable is product advertising? Ms. Brown's class designed an experiment to test the effectiveness of a well-advertised hand sanitizer. They compared the hand sanitizer with two brands of soap and water. As a control, the students rubbed their hands together for two minutes in warm water and then dried them with a towel. Their results are shown in the data table.

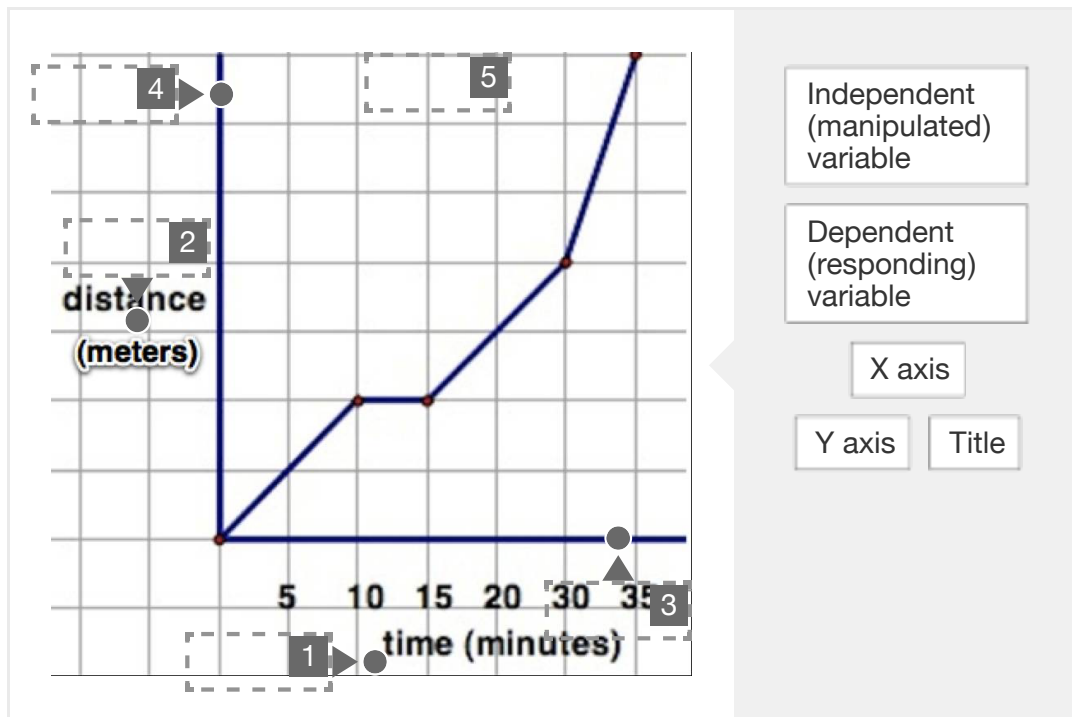
Which hand washing method is LEAST effective in killing bacteria?

Washing with

- A Soap A.
- B Soap B.
- C warm water.
- D hand sanitizer.

**Question 29 : 1511280**

Data presented in a line graph is organized in a certain way. Can you label the variables on this line graph?



**Question 30 : 623970**

LaTonya sees an advertisement in a magazine that says a certain type of mouthwash kills more germs than any other mouthwash.

What does LaTonya need to prove the company's claim is correct?

A	Images of the product
B	Evidence
C	Conclusion
D	Scientific Explanation