

SCIENCE

(Physics/Chemistry/Biology)

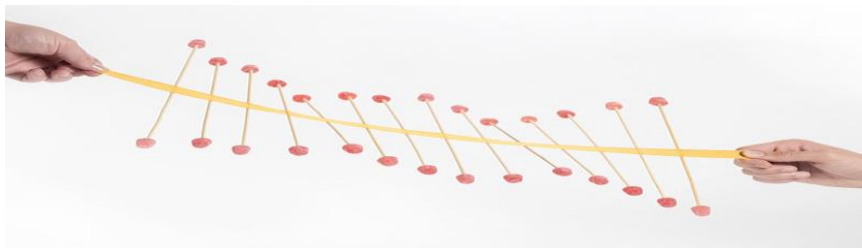
1. Make a model of first twenty elements of periodic table.
2. Learn and write the question answers and exercise of chapters.
3. Working Model

1. Purify Water With Charcoal



Add 8 drops of red food coloring to the water and stir until mixed. Now, add 1/4 cup of colored water to each of the baby food jars. To one jar, add 2 teaspoons of the activated carbon. Put the lids on both jars and set the jars in a place where they won't be disturbed for a couple days.

2. Build a wave machine



Gather your materials. Then, place two stools about 6 feet apart.

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Stretch a piece of duct tape (sticky side up) between the stools and tape it to the underside of each stool.

Leaving about 1 foot of tape empty on each end, center the skewers along the tape, placing each one about 1 1/2" away from the one before it.

Waves can only travel things that are touching or connected. This is the purpose of the tape. A disturbance in one of the skewers twists the tape, causing a disturbance in the skewer after it and so on and so forth.

Push a gummy candy onto both ends of each skewer.

Tap the skewer on one end of the tape and see what happens! Did you see a wave form and roll down the line?

Link

<https://www.kiwico.com/diy/play-learn/sound-music/wave-machine>

Question: Explain the difference between breathing and respiration. (3)

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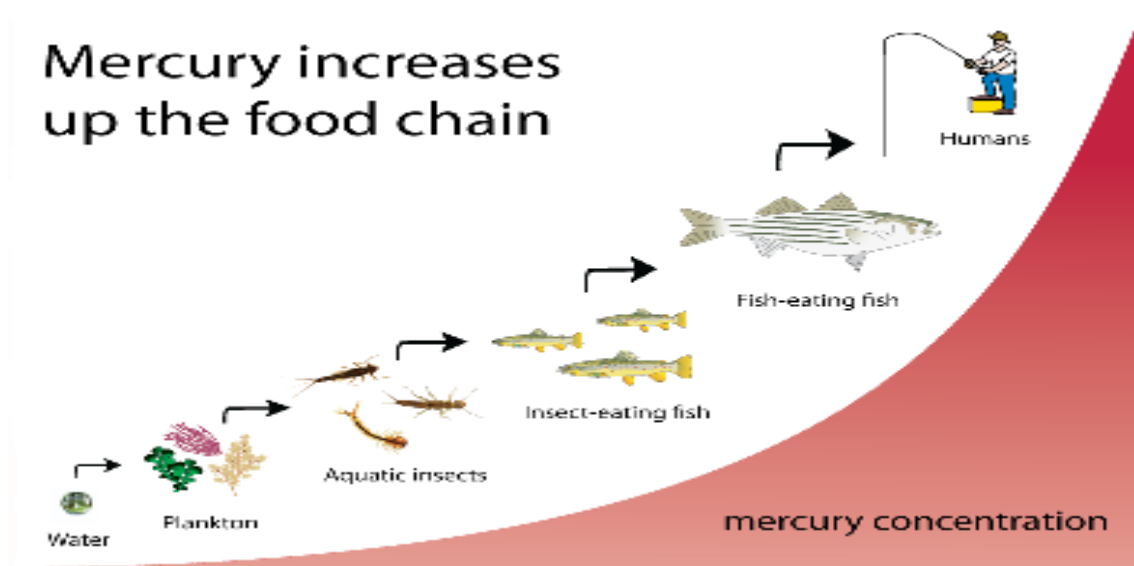
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Question: Below is the example of mercury concentration in the food chain.

Answer the following questions:



(i) State the term used in the above example of increasing mercury level in food chain. (2)

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(ii) Explain why organisms at the top of a food chain have higher concentration of mercury in their bodies than organisms at the base of the food chain? (2)

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(iii) Do you think this can be prevented and if yes, how? (2)

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Question: Explain how the biceps and triceps work as antagonistic muscles to move the arm at the elbow. (2)

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Question: Suggest how you can make sure you get enough protein in your diet, if you don't like eating meat or fish. (2)

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Question: Cats are predators. They eat other animals. Suggest where cats get this mineral from, in their diet. (1)

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Question: Why is water an important component in every diet? (3)

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Question: How is red blood cell different from white blood cell? (1)

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Question: Complete each sentence with the appropriate word from the list. (4)

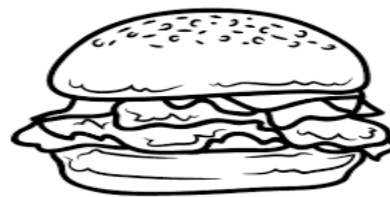
cilia	inhale	Aerobic	mitochondria
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- (i) is the cell organelle in which cellular respiration takes place.
- (ii) and mucus work to trap dirt and germs before we inhale.
- (iii) respiration takes place in the presence of oxygen.
- (iv) Breathing air is also called as

Question: Name the abiotic factors that affect the ecosystem. (any two) (2)

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Question: Your little brother's favourite meal is lamb burger and fries, with a sweet milky drink.



- (a) What nutrients does he get from this meal? (1)

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- (b) What else should he include in his diet? (1)

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- (c) Explain to him why he should not eat his favourite meal too often. (1)

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Question: Label any six bones and 2 joints in the below diagram of skeleton. (4)



Question: Explain why the food web could not exist without the producers? (2)

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Question: Make three food chains using the following organisms. (3)

Grasshopper, frog, snake, vulture, grass, rat, deer, lion

Question : Name any two minerals that we need to eat in our daily diet. (2)

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