ACTIVITY 1:

Substance	Mass(g)
sugar	25
salt	30
water	15

1. The table shows the masses of materials used to make a solution.

   What is the mass of this solution?

   A: 40 B: 70

   C: 85 D: 45

2.

Fruit	Mass(g)
apples	16
pears	15
strawberries	14

The table shows the masses of materials used to make a solution.

What is the mass of this solution?

A: 40 B: 80

C: 85 D: 45

3. A sample of a radioactive isotope has a mass of 80g.

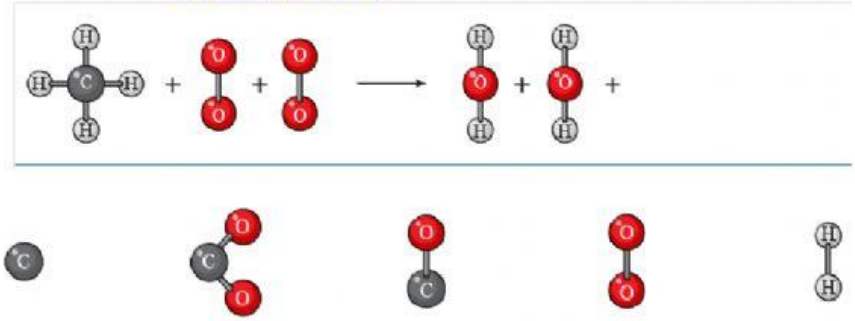
   What is the mass of the remaining radioactive isotope at the end of 4 half- lives.

   A: 40 g B: 10 g C: 5 g D: 20 g

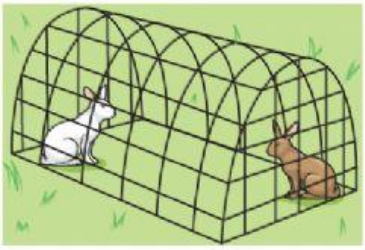
4. A sample of a radioactive isotope has a mass of 32g.

A: 8 g B: 2 g C: 16 g D: 4 g

5. Which molecule completes the chemical equation and shows that matter is conserved? Choose the correct molecule.



6. A student wants to make a new home for his pet rabbits. The new home must be outside and must reduce the warming effect of the Sun on hot days.



A:

Adding hanging ribbons

B:

Adding a solid cover

C:

Adding a sheet of wood

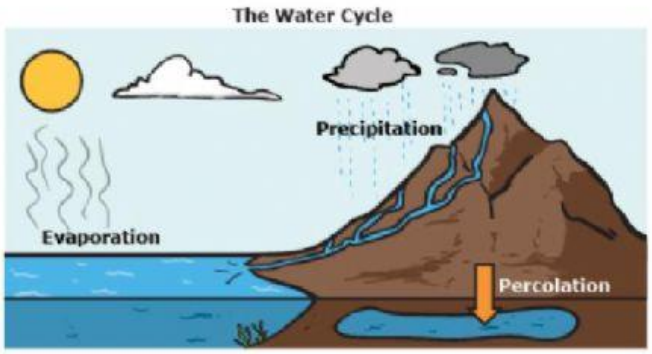
D:

Adding a clear cover

7. Which two parts of the plant are most important for gathering the matter and sunlight needed to make food?

A: roots B: leaves C: flowers D: stems

8.



Students wonder why water movers through the Water cycle instead of staying in one location.

Process	Main source of Energy or Force	
Evaporation	The Sun	Gravity
Precipitation	The Sun	Gravity
Percolation to ground water	The Sun	Gravity

9. A school is near a small creek (river).
The students noticed that sand and soil from the school playground sometimes wash into the creek (river). The creek (river) is becoming more shallow over time because of the sand and soil.
Which plan will best protect the creek's (river's) Ecosystem?

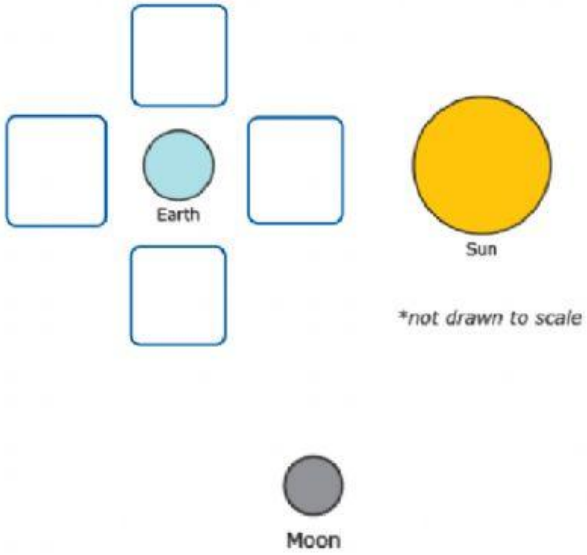
A: Use more water from the creek (river) for the school garden

B: Leave food out for animals to increase biodiversity.

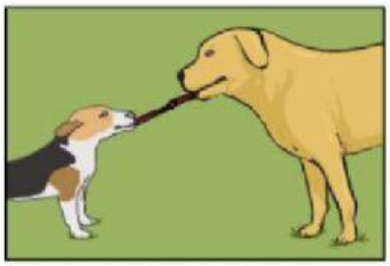
C: Remove earthworms and ants to reduce the number of holes the soil.

D: Grow native grasses to reduce the water runoff.

10. A student is making a diagram of the Sun, Earth and Moon.
Move the Moon into a position which will Illustrate a New Moon phase as seen from the Earth.



11. Two dogs are playing with a rope. The bigger dog slowly pulls the smaller dog towards itself as indicated in the picture below:



Which combination of forces causes the smaller dog to move towards the bigger dog. Use the arrows showing the value of the forces to illustrate this situation.

Small dog	Big Dog