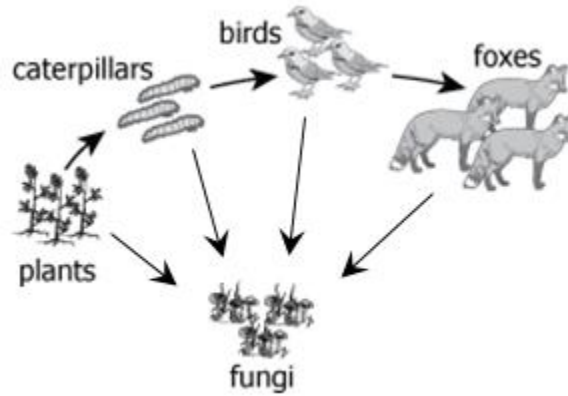




1. A group of students examine the food chain shown.



Which student *correctly* lists the organisms that are consumers in the food chain?

A

Student 1
plants, birds, and fungi

C

Student 3
caterpillars, birds, and foxes

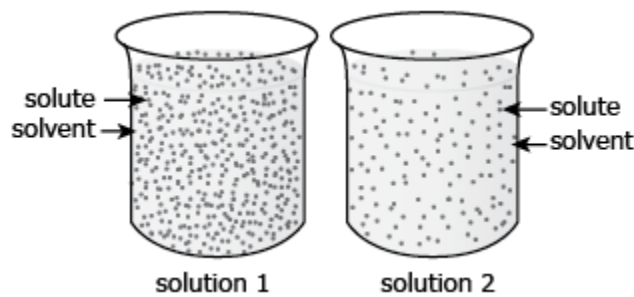
B

Student 2
plants and fungi

D

Student 4
fungi and foxes

2. The image shows two solutions.



Which statement *accurately* describes the concentrations of the solutions?

- A** Solutions 1 and 2 have the same concentrations because they have the same amounts of solute.
- B** Solution 1 is more concentrated than solution 2 because it has a greater amount of solute.
- C** Solutions 1 and 2 have the same concentrations because they have the same amounts of solvent.
- D** Solution 1 is more concentrated than solution 2 because it has a greater amount of solvent.

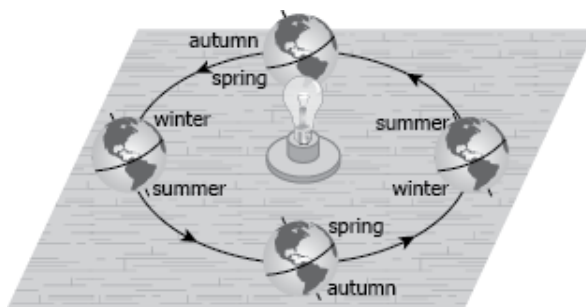
3. A teacher provides a student with four substances and asks him to make a mixture. The student records the quantities of the substances he mixes in a container to form the mixture, as shown.

Substance	Mass (grams)
water	300
salt	20
sugar	30
sand	40

The student places the mixture on an electronic balance and observes the mass of the mixture is 390 g. He claims that when two or more substances are mixed, the mass of each substance does not change.

Which statement *best* describes the student's claim?

- A The claim is incorrect because the salt and sugar dissolve in the water, which would decrease the mass of the mixture.
- B The claim is incorrect because the sand does not dissolve in water, which would increase the mass of the mixture.
- C The claim is correct because the sum of the masses of the substances mixed together is equal to the mass of the mixture.
- D The claim is correct because the substances join to form a new substance with a mass that is equal to the mass of the mixture.
4. The model uses a light bulb and four globes to show different seasons.



Based on the model, which factor *correctly* describes the cause of seasonal changes?

- A Due to the tilt of Earth, both hemispheres experience the same seasons at the same time.
- B A hemisphere experiences summer when Earth's distance from the Sun decreases.
- C The tilt of Earth on its axis changes the amount of sunlight on each hemisphere.
- D Due to Earth's rotation on its axis, the amount of sunlight reaching Earth's surface changes.