

Name:

AXIOM CHALLENGE

4th grade; Spring 2026

$$\begin{array}{r} 783 \\ - 297 \\ - 264 \\ \hline \end{array}$$

$$\begin{array}{r} 336 \\ - 251 \\ - 11 \\ \hline \end{array}$$

$$\begin{array}{r} 914 \\ - 577 \\ - 153 \\ \hline \end{array}$$

$$\begin{array}{r} 273 \\ - 77 \\ - 51 \\ \hline \end{array}$$

$$\begin{array}{r} 723 \\ - 240 \\ - 29 \\ \hline \end{array}$$

$$\begin{array}{r} 73 \\ \times 65 \\ \hline \end{array}$$

$$\begin{array}{r} 63 \\ \times 15 \\ \hline \end{array}$$

$$\begin{array}{r} 82 \\ \times 99 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ \times 74 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ \times 30 \\ \hline \end{array}$$

$$19 \overline{)1349}$$

$$61 \overline{)5490}$$

$$65 \overline{)6110}$$

$$42 \overline{)1890}$$

$$91 \overline{)4368}$$

Convert these decimals into fractions:

$$0.3333 = \underline{\hspace{2cm}}$$

$$0.2 = \underline{\hspace{2cm}}$$

$$\frac{1}{2} + 2 =$$

$$\frac{2}{4} + 2 =$$

$$\frac{3}{6} + 4 =$$

Answer as an improper fraction in simplest form:

$$3 - \frac{13}{5} =$$

$$5 - \frac{14}{9} =$$

$$4 - \frac{8}{5} =$$

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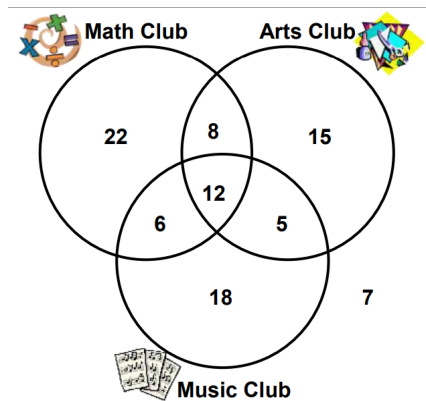
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- 1) Max had 48 baseball cards. He gave $\frac{1}{4}$ of them to his friend. Then he bought 18 more cards.

How many cards does he have now?

_____ cards.

- 2) The Venn diagram below shows the number of Grade 4 students who joined the math, arts, and music clubs.



How many students joined both arts and music?

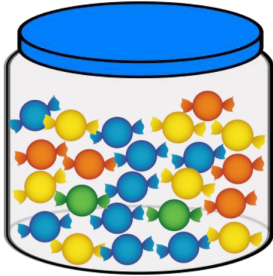
_____ students.

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3) What is the probability of picking an orange candy?



4) A rectangle has a length of 12 cm and a width of 7 cm.

a) What is its perimeter? (Include units please.)

b) What is its area? (Include units please.)

5) There are 5 sisters in a room.

- Anna is reading
- Bella is cooking
- Carla is playing chess
- Dana is sleeping

What is the fifth sister doing?

6) Ava has \$36 in her account at Dedham Savings. She deposits \$8 every week for 4 weeks, then spends \$15. **How much money does she have now?**

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7) Find the next two numbers:

3, 6, 12, 24, _____, _____.

8) Solve:

$$10 + (6^2 - 12) =$$

9) What is the average of these following numbers?

6, 8, 10, 12

10) A bakery makes 240 cookies. They pack them into boxes of 12.

a) How many boxes can they fill?

_____ boxes.

b) If they sell 15 boxes, how many cookies are left?

_____ cookies.

11) A square has a perimeter of 36 inches. **What is the length of one side?**

_____ inches.

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1) Complete the sentence using either the word *physical* or *chemical*.

A rock heating up a campfire is a _____ change.

Using polish to remove tarnish from a silver spoon is a _____ change.

An icicle forming on the roof is a _____ change.

2) Read the example and answer the question that follows.

Arctic foxes live in the cold Arctic tundra. The Arctic fox's skin is adapted to help the animal survive in cold places.

Which animal's skin is also adapted for survival in cold places?

a) Caribou



b) Amazon Milk Frog

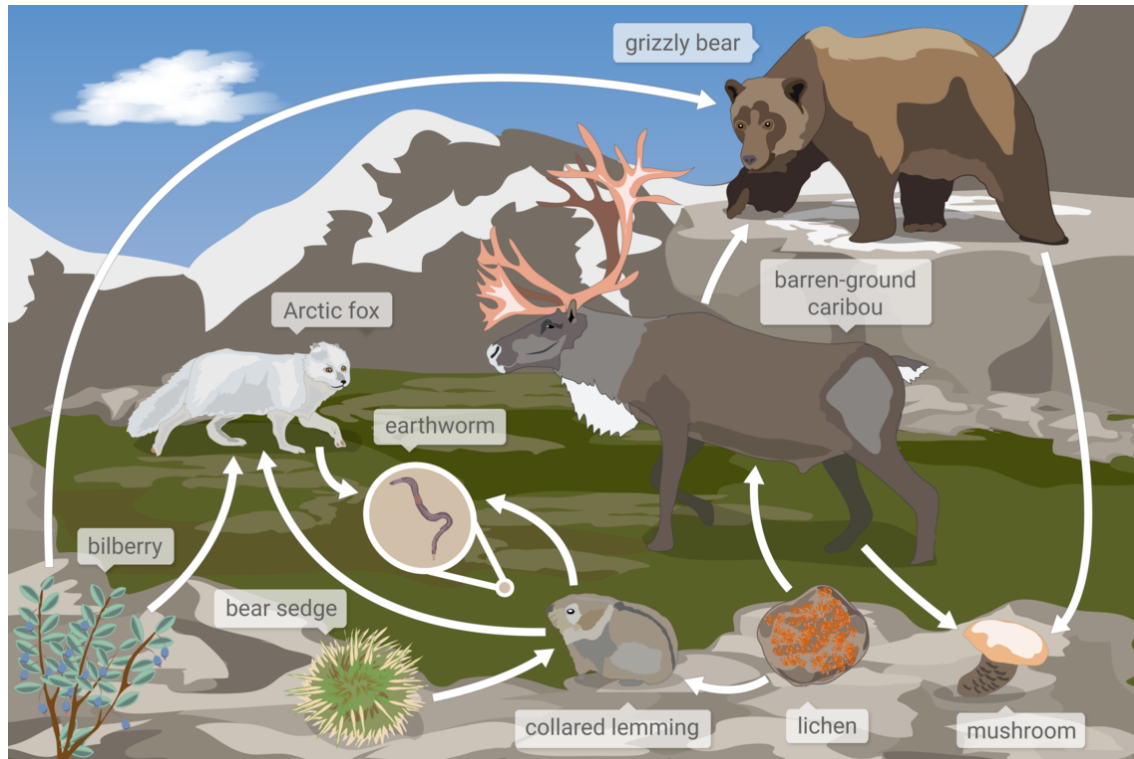


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3) Below is a food web from a tundra ecosystem in Nunavut, a territory in Northern Canada.



The arrows in a food web represent how matter moves between organisms in an ecosystem. A decomposer is an organism that breaks down (decomposes) dead organisms (like animals) and releases the nutrients back to the soil.

Based on the arrows, which of the following organisms is a *decomposer*?

- a) Mushroom
- b) Bilberry

4) The lunchroom at Sunset Elementary School floods each year. When there is more than one inch of water on the ground outside, water flows under the doors and into the building. Dr. Rogers, the principal, wants to find a way to protect the lunchroom from flooding. **(Next page!)**

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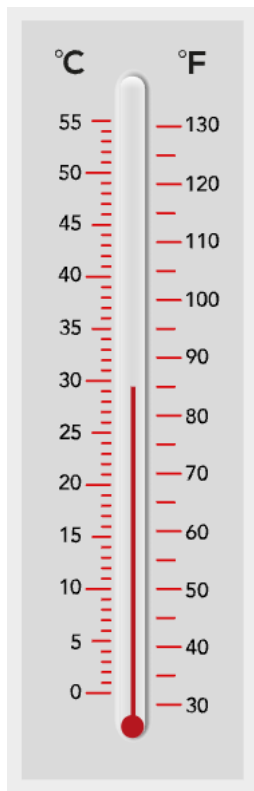
Select the options when the lunchroom is most likely to flood.

- a) During a storm with lots of rain
- b) During a drought
- c) When a river near the school overflows
- d) When a large amount of snow melts quickly (near the school)

5) Which of the following is a fossil?

- a) A drawing of a dinosaur
- b) A dinosaur model made from plastic
- c) Dinosaur remains preserved in rock

6) What temperature, in Fahrenheit, is it currently?



- a) 30 degrees
- b) 80 degrees
- c) 29 degrees
- d) 85 degrees