Form	**BA - 2, Science, Grade 3, SY 24-25**
Identifier	F-7ZWBC5_C62922

Item	**BA-2_Grade 3_01**
Identifier	I-SCI-F-S000026_C75569
Standards	SCI.3.3-LS2-1

Zebras live in large herds. When they are all together, their stripes are confusing. This makes it difficult to see where each zebra is.

How could living in a herd help a zebra to survive?

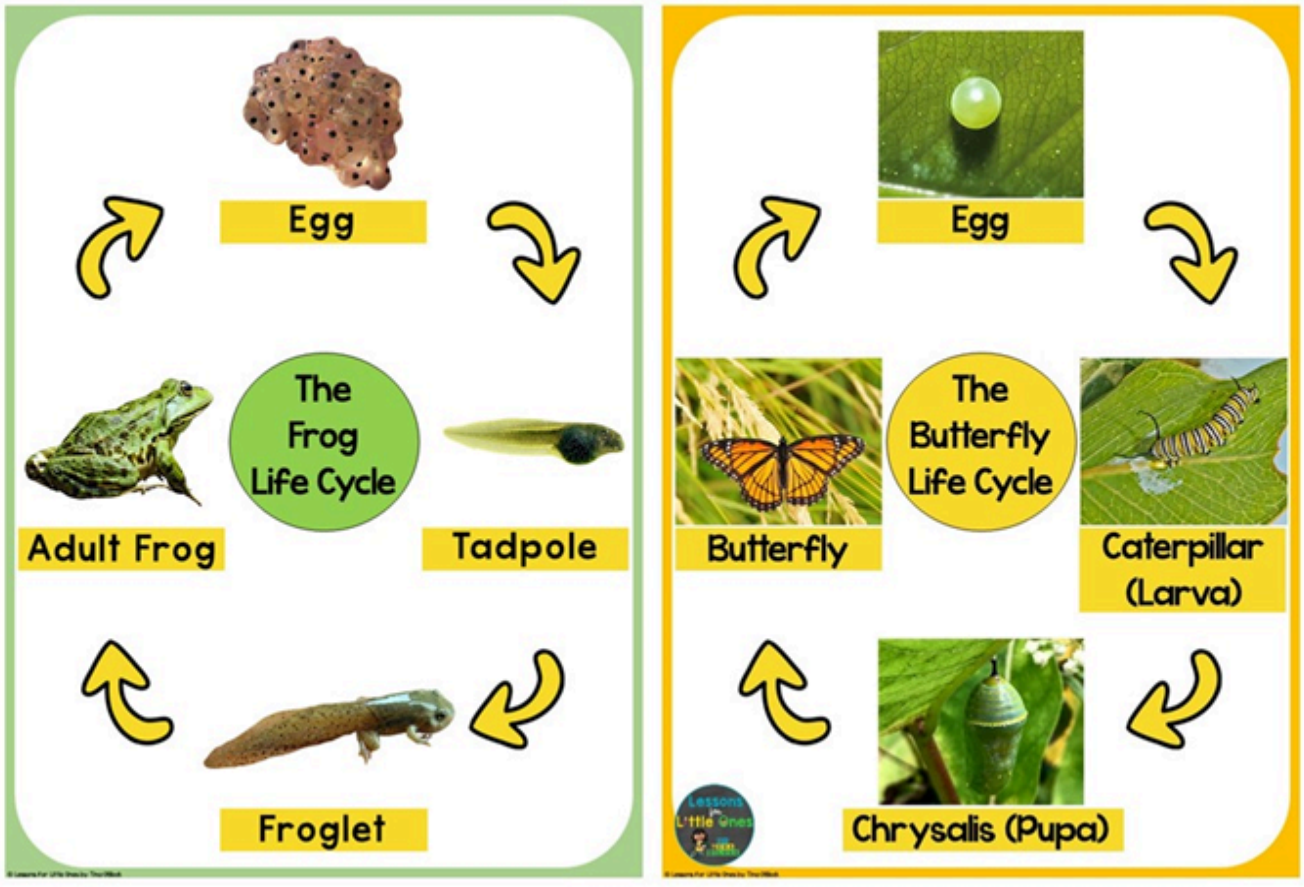
A Predators are afraid of big herds of zebras. They will not attack them.

B Zebras making huffing sounds to communicate with other zebras in the heard.

C Predators like to attack big herds of zebras. They do not attack zebras who are alone.

D Predators will not know where to attack because of the zebra’s stripes.

Item	BA-2_Grade 3_02
Identifier	I-SCI-F-S000026_C96950
Standards	SCI.3.3-LS1-1



Which of the following best explains how the life cycles of a frog and a butterfly are similar, despite their different stages of development?

A Both animals undergo a form of metamorphosis.

B Both animals' life cycles include birth, growth, reproduction, and death.

C Both animals spend their entire life in the same environment.

D Both animals develop in a similar way from larvae to adult.

Item	BA-2_Grade 3_03
Identifier	I-SCI-F-S000026_C75120
Standards	SCI.3.3-LS1-1

A model of a frog's life cycle shows these stages: egg, tadpole, adult frog, and death.

Which of these changes would make this model work for other living things, like plants?

A Change the tadpole stage to a seedling stage.

B Take out the death stage because plants don’t die.

C Add a stage that shows growth before making new plants or animals.

D Show the animal growing straight from egg to adult without changing.

Item	BA-2_Grade 3_04
Identifier	I-SCI-F-S000026_C51388
Standards	SCI.3.3-LS1-1

What is the biggest difference between the life cycle of a flowering plant and a butterfly when making a model of their life cycles?

- A Flowering plants make seeds, while butterflies lay eggs.
- B Flowering plants can make seeds many times, but butterflies usually lay eggs only once.
- C Butterflies never change from egg to adult, but flowering plants do not.
- D Plants and butterflies have different life cycles because plants don’t die.

Item	BA-2_Grade 3_05
Identifier	I-SCI-F-S000026_C61340
Standards	SCI.3.3-LS3-1

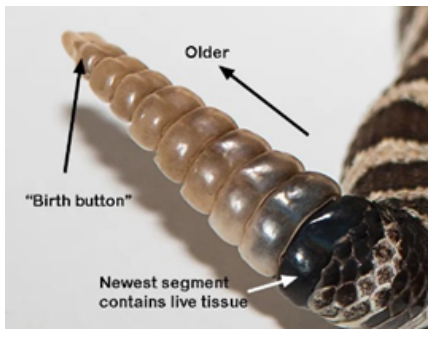
Rattlesnake Rattles

Pedro saw a rattlesnake at the zoo. Picture 1 shows a rattlesnake.

Picture 1 - Rattlesnake

Pedro wanted to learn more about rattlesnakes. He read that:

- Rattles are hollow pieces that are joined together. They are made of the same material as the snake's scales.
- A rattlesnake shakes its tail to warn predators that the snake will attack.
- The rattling noise is made when the snake holds its tail straight up and shakes it. The pieces hit one another and make a buzzing sound.
- When a rattlesnake grows, it sheds its skin, a new rattle is added each time.
- The rattles on a snake may break off, but then the rattles grow back one piece at a time.



Pedro read a news article that said some groups of rattlesnakes do not have fully developed rattles. Instead, they have curled tails with a rattle that cannot make a rattling sound. He made a table to show what he learned.

Table 1 – Rattlesnakes Without Rattles

Type of Rattlesnake	Where these Rattlesnakes Live	Characteristics
Prairie	South Dakota	• Most snakes in the population have rattles on their tails. • Some of the snakes have a curled tail with a rattle. • Curled tails cannot make a rattling noise. • Snakes with curled tails are more likely to bite predators and prey.
Santa Catalina	Catalina Island, California	• The population of snakes is from a small island. • None of the snakes in the population have rattles on their tails.

Which statement **BEST** explains why prairie rattlesnakes can have different tails?

A. The snakes with curled tails are very old and lost the rattles on their tails.

B. The snakes with curled tails broke off their rattles so that they could hide in new places.

C. The snakes with normal tails and the snakes with curled tails live in different environments.

D. The snakes with normal tails and the snakes with curled tails inherited different traits from their parents.

Item	BA-2_Grade 3_06
Identifier	I-SCI-F-S000026_C07013
Standards	SCI.3.3-LS3-1

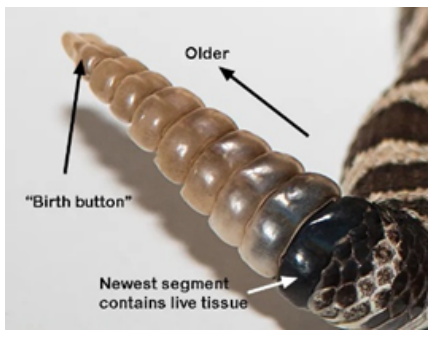
Rattlesnake Rattles

Pedro saw a rattlesnake at the zoo. Picture 1 shows a rattlesnake.

Picture 1 - Rattlesnake

Pedro wanted to learn more about rattlesnakes. He read that:

- Rattles are hollow pieces that are joined together. They are made of the same material as the snake's scales.
- A rattlesnake shakes its tail to warn predators that the snake will attack.
- The rattling noise is made when the snake holds its tail straight up and shakes it. The pieces hit one another and make a buzzing sound.
- When a rattlesnake grows, it sheds its skin, a new rattle is added each time.
- The rattles on a snake may break off, but then the rattles grow back one piece at a time.



Pedro read a news article that said some groups of rattlesnakes do not have fully developed rattles. Instead, they have curled tails with a rattle that cannot make a rattling sound. He made a table to show what he learned.

Table 1 – Rattlesnakes Without Rattles

Type of Rattlesnake	Where these Rattlesnakes Live	Characteristics
Prairie	South Dakota	• Most snakes in the population have rattles on their tails. • Some of the snakes have a curled tail with a rattle. • Curled tails cannot make a rattling noise. • Snakes with curled tails are more likely to bite predators and prey.
Santa Catalina	Catalina Island, California	• The population of snakes is from a small island. • None of the snakes in the population have rattles on their tails.

Use the information in Table 1 above to answer the question. Which statement **BEST** explains why none of the Santa Catalina rattlesnakes have rattles?

A The rattlesnakes have the trait for curled tails instead of normal tails.

B The rattlesnakes shed their skin too often to make rattles.

C The rattlesnakes did not inherit the trait for rattles from their parents.

D The rattlesnakes remove the rattles from their tails when they are born.

Item	BA-2_Grade 3_07
Identifier	I-SCI-F-S000026_C98723
Standards	SCI.3.3-LS3-1

Bull snakes do not have venom. Bull snakes can be found in some of the same places as prairie rattlesnakes. Bull snakes and prairie rattlesnakes are not related to each other. The two kinds of snakes have some traits that are alike. The pictures show a bull snake and a prairie rattlesnake when a predator is nearby.

Bull Snake

Prairie Rattlesnake

Based on the pictures, how are bull snakes and prairie rattlesnakes alike? Select the **TWO BEST** answers

- [ ] A They both have rattles on their tails.
- [ ] B They both have patches of light and dark scales.
- [ ] C They both curl up when a predator is nearby.
- [ ] D They both kill predators when they are in danger.
- [ ] E They both have long tongues that help them smell.

Item	BA-2_Grade 3_08
Identifier	I-SCI-F-S000026_C54090
Standards	SCI.3.3-LS3-2

Use the information below and your knowledge of science to answer the question.

People need vitamin D to help their bones get enough calcium so that the bones can be strong. People can get vitamin D from milk, fish, and mushrooms. People's bodies can also make vitamin D when their skin absorbs light from the Sun.

Which situation will **MOST LIKELY** cause a person's bones to become weak?

A The person spends a lot of time outside.

B The person avoids foods with vitamin D.

C The person eats cereal with milk for breakfast each morning.

D The person eats lots of fish that provide vitamin D.

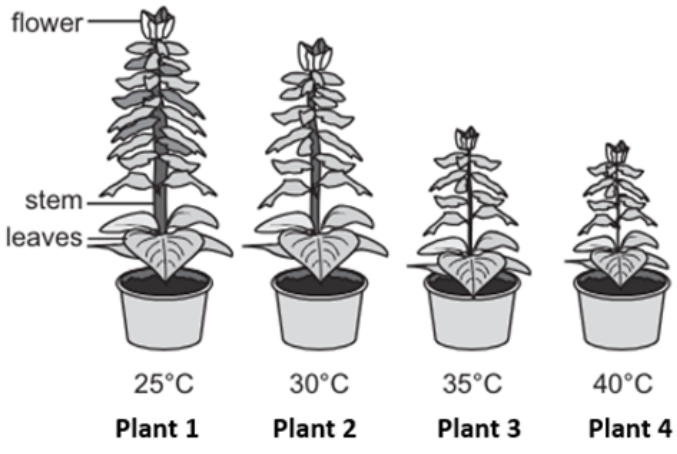
Item	BA-2_Grade 3_09
Identifier	I-SCI-F-S000026_C11282
Standards	SCI.3.3-LS3-2

Plants and Heat

Each type of plant has different needs. A cactus grows well where it is hot and dry. A fern grows best where it is damp. Some plants grow best in sunlight. Other plants do better in the shade. Students investigated how hot weather affects plants. Students test a type of plant called salvia to determine what conditions are best for the salvia plant to grow in. Students completed the following investigation:

- Students bought four plants that were each the same height and age.
- All plants were planted in the same soil.
- All plants were given the same amount of water, light, and nutrients.
- All plants were kept at a temperature of 25°C most of the time.
- Every three days, the plants were exposed to different temperatures for several hours.
- The plants were compared after several weeks.

Figure 1. Growth of Salvia Plants at Different Temperatures



Use the information in Figure 1 to answer the question. In which ways were the salvia plants in the investigation affected by the temperature? **Select the TWO correct answers.**

- [ ] A width of stem
- [ ] B height of plant
- [ ] C shape of leaves
- [ ] D shape of flowers
- [ ] E number of flowers

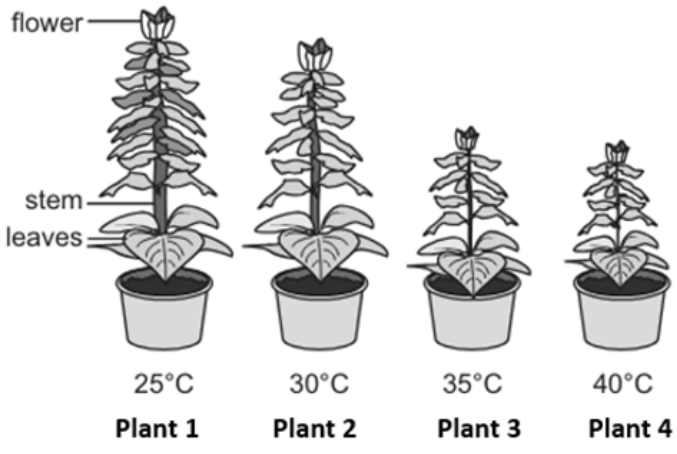
Item	BA-2_Grade 3_10
Identifier	I-SCI-F-S000026_C62382
Standards	SCI.3.3-LS3-2

Plants and Heat

Each type of plant has different needs. A cactus grows well where it is hot and dry. A fern grows best where it is damp. Some plants grow best in sunlight. Other plants do better in the shade. Students investigated how hot weather affects plants. Students test a type of plant called salvia to determine what conditions are best for the salvia plant to grow in. Students completed the following investigation:

- Students bought four plants that were each the same height and age.
- All plants were planted in the same soil.
- All plants were given the same amount of water, light, and nutrients.
- All plants were kept at a temperature of 25°C most of the time.
- Every three days, the plants were exposed to different temperatures for several hours.
- The plants were compared after several weeks.

Figure 1. Growth of Salvia Plants at Different Temperatures



Which variables have the **GREATEST** effect on how tall the plants in the investigation grow? **Select the TWO correct answers.**

- [ ] A the temperature around the plants
- [ ] B the length of the roots of the plants
- [ ] C the number of leaves the plants have
- [ ] D the inherited characteristics of the plants
- [ ] E the size of the plants when they are first planted

Item	BA-2_Grade 3_11
Identifier	I-SCI-F-S000026_C89392
Standards	SCI.3.3-LS2-1

Orca Whales

Orca whales, also known as killer whales, live in family groups called pods. Each pod is like a big family that can have up to forty whales! These pods are very close, and they help each other find food and take care of their babies. Orcas communicate with each other using special sounds, like clicks and whistles, to talk and find their way in the ocean. Every pod has its own unique sounds, like a special language just for their family. They travel, hunt, and play together, making sure everyone in the pod stays safe and happy.

Select the **BEST TWO** statements that describe how a young Orca whale may benefit from living in a pod.

- [ ] A It helps the young Orca whales learn how to swim.
- [ ] B It helps the young Orca whales to find food.
- [ ] C It allows many whales to help care for the young Orca whales.
- [ ] D Living in a pod helps the young Orca to do tricks
- [ ] E It allows the young Orca to stray from the pod because another will come after them.

Item	BA-2_Grade 3_12
Identifier	I-SCI-F-S000026_C97631
Standards	SCI.3.3-LS2-1

Orca Whales

Orca whales, also known as killer whales, live in family groups called pods. Each pod is like a big family that can have up to forty whales! These pods are very close, and they help each other find food and take care of their babies. Orcas communicate with each other using special sounds, like clicks and whistles, to talk and find their way in the ocean. Every pod has its own unique sounds, like a special language just for their family. They travel, hunt, and play together, making sure everyone in the pod stays safe and happy.

Which of the statements below is **NOT** a way that living in a pod helps a young Orca survive?

- A Young Orca whales are cared for their mother as well as others.
- B Each pod has a unique special language.
- C Pods hunt together making it more efficient to feed every whale in the pod.
- D Traveling in large groups makes it easy for predators to hunt the young Orca whales.