One Parent, New Life

Read how some plants and animals make replicas.

L.3.2.2 "Describe and provide examples of plant and animal offspring from a single parent organism (e.g., bamboo, fern, or starfish) as being an exact replica with identical traits as the parent organism."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB In each paragraph, underline how the offspring forms and circle two traits it shares with its parent. Use your marks to explain why the offspring is a replica.

Replicas in the Garden and Sea

1. At the edge of a garden, a bamboo plant sends a stem under the soil. This stem is called a rhizome. A new bamboo shoot grows up from it, not from a seed. The shoot has just one parent plant. As it grows, it will have the same inherited traits as that parent, such as hollow, jointed stems and long, narrow leaves. It starts out shorter, but it is a replica.

2. In a tide pool, some sea anemones make new anemones by splitting in two. Each piece grows the parts it needs to live on its own. Both new anemones come from one parent. They have the same inherited traits as the parent, including a soft body and tentacles around the mouth. At first, each new anemone may be smaller. Being smaller does not change its inherited traits.

3. Some sea stars can make offspring without a second parent. A piece breaks away. If that piece includes part of the center, it can grow missing parts and become a new sea star. The new sea star has the same inherited traits as its one parent, such as its body shape and rough skin. It may be smaller while it grows, but it is still a replica.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does a new bamboo plant form from one parent? Name two traits it shares with that parent.

2. How do some sea anemones make offspring from one parent? Name two traits the offspring share with that parent.

3. What must a broken-off sea star piece include to grow into a new sea star? Name two traits it shares with its parent.

4. A bamboo shoot and a new sea anemone are smaller than their parents. Why are they still replicas?

3 YOUR TURN

Your own words

A prickly pear cactus has flat pads and prickles. One pad falls off, takes root, and grows into a new cactus. Draw the parent and new cactus, and label two matching traits. Write one sentence explaining why the new plant is a replica even though it is smaller.

ANSWER KEY

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GRADE 3 · L.3.2.2

PART 1 · READ AND MARK

In each paragraph, underline how the offspring forms and circle two traits it shares with its parent. Use your marks to explain why the offspring is a replica. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does a new bamboo plant form from one parent? Name two traits it shares with that parent.	**A new shoot grows from the parent's underground stem. It has hollow, jointed stems and long, narrow leaves like its parent.**
2	How do some sea anemones make offspring from one parent? Name two traits the offspring share with that parent.	**The parent splits in two, and each piece grows into an anemone. The offspring have soft bodies and tentacles around their mouths.**
3	What must a broken-off sea star piece include to grow into a new sea star? Name two traits it shares with its parent.	**The piece must include part of the center. The new sea star shares its parent's body shape and rough skin.**
4	A bamboo shoot and a new sea anemone are smaller than their parents. Why are they still replicas?	**Each comes from one parent and has the same inherited traits as that parent. Each may be smaller while it grows.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Drawing: A large prickly pear cactus and a smaller rooted cactus, each labeled “flat pads” and “prickles.” Sentence: The new cactus grew from its parent's pad, so it has the same inherited traits even though it is smaller.

Accept descriptions that show the offspring formed from one parent and shares inherited traits with that parent. A smaller size does not mean the young offspring is a different kind of organism.