The Circle of Life

NJ 2020 PERFORMANCE EXPECTATION ALIGNMENT:

2.1.2.PP.1 – Define reproduction.

2.1.2.PP.2 – Explain the ways in which parents may care for their offspring (e.g., animals, people, fish).

TARGET GRADE: Grade 1

TIME: 40 Minutes

MATERIALS NEEDED:

- Worksheet: "Can This Make Reproduce?" one per student
- One copy of the document, "Can This Reproduce?" Pictures
- One copy of the Yes and No signs
- Masking tape
- A few identical pencils to use as example
- Small box of magic markers or crayons to use as example
- Laptop or desktop computer with PowerPoint on it
- PowerPoint "Reproduction"
- Home-School Connection Activity: "Circle of Life" – one per student (optional)
- LCD projector and screen

ADVANCE PREPARATION FOR LESSON:

- Print out one copy of the document, "Can This Reproduce?"
- Ensure projector is set up and connected to the internet for the lesson.
- Print out the "Yes" and "No" signs and post as headers on the black or white board at the front of the room, giving several feet in between the two. (Note: it may be helpful to print each side on a different color paper for clarity.)
- Tear off enough small pieces of tape to have them ready to post the individual pictures beneath the "yes" and "no" signs during the activity.
- TEACHER NOTE: If students are curious about details of reproduction beyond the scope of this lesson, inform them that those questions are beyond what we talk about in this lesson. Contact parents to let them know their child was curious.

LEARNING OBJECTIVES:

By the end of this lesson, students will be able to:

- 1. Correctly define the term "reproduction." [Knowledge]
- Correctly differentiate between things in the world that do and do not reproduce. [Knowledge, Skill]

PROCEDURE:

STEP 1: Introduce the topic by explaining that you will be talking today about reproduction. Ask the students, "What does it mean to reproduce something?" After hearing a few answers, say, "reproduction' means to make something again, or to make a copy of it." Give, as an example, a handout you have used in class. Hold up an original and a copy of a worksheet and explain that when you make copies of a sheet like this, you are reproducing that sheet. Explain that, for this to reproduce, you had to do something you put it on the copy machine, pressed the buttons you needed to and the copy machine made copies. Say, "A photocopy machine can't, on its own, just make copies. That's because it's not alive."

(5 minutes)

STEP 2: Say, "What do we know that is alive and can reproduce?" Prompt for student responses such as plants, animals, dogs, cats, birds, etc. "What about humans?" After students say yes, say, "When a human has a baby, that's also called reproduction. Let's take a look at a few different things and decide if they can reproduce." Distribute the worksheet, "Can This Make Reproduce?" to each student and ask them to complete it together. Be sure to have each student complete a sheet, and to put their name at the top of the one they completed.

(8 minutes)

STEP 3: After five minutes, tell the students you will go through the answers together. **Holding up the pictures of both living things and inanimate objects one at a time, in the order in which they are listed on the worksheet, ask, "Can this reproduce?"** As the class calls out responses to each, stick the sheet up on the board under the "yes" or "no" sign. Once you have gone through all the sheets, ask the students what they notice about the lists, probing for the fact that all of the things listed beneath the "yes" sign are living things, and all the things on the "no" list are not. Tell them to check their sheets as they go along and make corrections as necessary.

(5 minutes)

Ask, "When it comes to living things, is there only one tree in the world, or are there many trees?" Show the first PowerPoint slide with pictures of different trees on them. When students say there are different kinds of trees, say, "Right. Trees can look really different, but they're still all trees. What about cats and dogs, is there only one kind of cat and only one dog? Or are there many types of cats and dogs?" Show the next PowerPoint slide of different types of cats and dogs. Say, "Same thingthese all look super different, but they're all types of cats and dogs. But what about when dogs, cats and other animals reproduce? Sometimes, they will be nearly exact copies – like these puppies, who were all born at the same time from the same mom" (show the slide with litters with the same-colored puppies). Say, "Sometimes, puppies can be born to the same mom but they will look a little different." Show the next slide with a picture of a diverse litter of puppies.

Explain that with some non-living things, what you will get will be exact copies. Hold up the small box of pencils and take out a few to show to the class. Say, "When you buy something like pencils, what comes in the box are all exact copies of each other." Hold up several markers or crayons of the same type, but different colors. Say, "Sometimes, you'll need things that are the same type of things, but have differences. These are all markers [crayons], but they're different colors. Now remind me, can these pencils and markers [crayons] reproduce on their own?" Validate the student responses when they all say "no."

(12 minutes)

STEP 4: Let students know that living things can reproduce in a few different ways: some babies grow inside the person or animal and some babies come from laying an egg (continue PowerPoint to show pictures of baby birds and baby alligators being born from eggs).

Say, "One other role of a parent – whether it's a person or an animal – is to take care of their baby or babies." Ask students, "what are some ways that parents care for their offspring after they reproduce?" Answers may include: make sure they have food, water, or other nutrients, make sure they are growing up healthy, keep them safe from predators or things that might hurt them, and give them love.

Distribute the worksheet, "Circle of Life Home-School Connection Activity," and recommend that students to complete it at home with a parent or caregiver. Be sure to have them and their parent/caregiver sign their name to indicate that they worked on it together (optional).

RECOMMENDED ASSESSMENT OF LEARNING OBJECTIVES AT CONCLUSION OF LESSON:

Although students will be completing the worksheet in pairs/small groups during the lesson, teachers can ask each student to complete one individually, to assess objectives one and two.

HOME-SCHOOL CONNECTION ACTIVITY:

Distribute the optional "Circle of Life Home-School Connection Activity" and recommend that students to complete it at home with a parent/caregiver. Be sure to tell the students that both they and their parent/caregiver should to sign it when it's done, and that they should bring it back to school the next day.

Can This Reproduce? Worksheet

Name:_____

Look at each picture. If what you see can reproduce, circle "yes." If it can't, circle "No."



PEOPLE YES NO



CARS YES NO



SHOES

YES NO



PIZZA YES NO



ELEPHANTS



GRASS YES NO

The Circle of Life - Home School Connection Activity

Dear Parent/Caregiver: Today in school, we talked about reproduction – what can reproduce, and what can't. This activity is for you and your child to do together!

Please name th	ree things at hom	e that CANNOT	reproduce:
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1._____

2._____

3. _____

Please name three living things that CAN reproduce:

1._____

2._____

3. _____

WE DID THIS TOGETHER!

Signed, Parent/Caregiver: _____

Signed, Student: _____