

MARCH

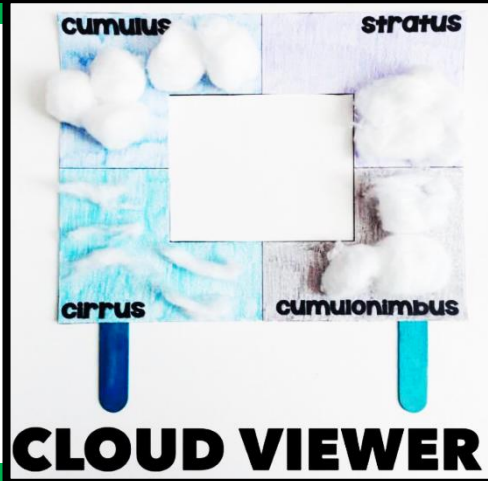
SPRING STEM & ELA ACTIVITIES



Basketball Belles



Cloudy With a Chance of Meatballs



The Bee Tree



Jamie O' Rourke and the Big Potato



Simple, Engaging STEM Challenges to Supplement Favorite Spring Read Alouds

LESSON PLANS

KEY VOCABULARY

HOOP SHOOT+ Basketball Pelles



110-65/COGS Standard Alignment: K-2-ET61-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. K-2-ET61-2: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Challenge Description: Students will construct a simple, working model of a small basketball goal using a Styrofoam cup, paper plate, and scotch tape. The goal can be taped or taped directly on a wall or cabinet for students to play with, or older students may also attempt to build a full base for the goal out of linking cubes or Legos. If students attempt this piece, the base must be heavy and balanced enough to withstand the weight of the backboard and net. After constructing their basketball goal, students will play a "Hoop Shoot" game against group members, shooting from three different distances to try to score the most points.

Suggested Materials: Styrofoam cups (1 per group), paper plates (1 per group), Scotch tape (1 roll per group), crayons or markers to decorate backboard/net, ping pong balls (or plastic practice golf balls (1 per group)).
OPTIONAL for base: Lego bricks, Snap/Linking Cubes with Scotch tape.

LESSON PLAN

1. Prime students' background knowledge about goals by projecting a variety of Google images on a whiteboard. Discuss the different types of goals used for different sports, such as basketball, soccer, and football. Discuss the similarities and differences in different designs and basketball goal are most important. Refer to the provided vocabulary cards as needed and display them in your classroom.
2. Have students label the parts of their basketball goals in their student booklets to match the vocabulary cards.
3. Introduce permitted materials and share the challenge. Allow students to share ideas for how they might work and fit together to create a basketball goal. Allow students at least 45 minutes to work in small groups to create and test goal designs, play the "Hoop Shoot" game, and record a whole class closing discussion and reflection, allowing students to share what they learned about goal designs. Record their ideas on the provided teacher chart and in individual booklets.

HOOP SHOOT+ Vocabulary Cards

goal

a structure in which a ball is passed through in order to score

backboard

a square-shaped, upright board behind the basket

rim

the upper, outer edge of the circular basket from which the net hangs

base

the lower part of the goal that supports the backboard and basket



HOOP SHOOT

HOOP SHOOT+ Basketball Pelles

Parts of a Basketball Goal



Types of Goals

STUDENT BOOKLETS

Parts of a Basketball Goal

My Basketball Goal

Basketball Pelles

Maker Task Cards

Use the following task cards in a Makerspace or with STEMins for students to make more creations.

Make a model of a basketball court.



Make a poster about the rules of basketball.



Make up a new game you can play with a basketball.



Design a new and improved basketball shoe.



HOOP SHOOT

Choose 3 different distances to shoot from. Each player may shoot 10 times. Draw a tally mark in the box for each basket made, then add up the total points.

Player 1

1 points	2 points	3 points

Total Points: _____

Player 2

1 points	2 points	3 points

Total Points: _____

HOOP SHOOT+ Basketball Pelles

STEM CHALLENGE
Can you create a working basketball goal and use it to shoot hoops?

Types of Goals

MAKER CARDS

Simple, Engaging STEM Challenges to Supplement Favorite Spring Read Alouds

BEE HOTEL

The Bee Tree

1. Read the story.
2. Listen to the audio.
3. Draw a bee.
4. Draw a hive.
5. Draw a flower.
6. Draw a leaf.
7. Draw a branch.
8. Draw a trunk.
9. Draw a root.

Bee colonies **solitary bee**

Why are bees important?

BEE HOTEL

cumulus

stratus

Types of Clouds

Cloudy With a Chance of Meatballs

cumulus **stratus**

clouds seen in fair weather

low, thick blanket-like clouds

cirrus

clouds found very high in the sky

do not produce rain and do not have a definite base

are very good for flying

and carpenter bees are

Cloudy With a Chance of Meatballs

Maker Task Cards

Following task cards in a Makerspace or with STEM Pins for students to make more creations.

Make a model shelter that protects itself from weather.

Make a chart or calendar to track the weather.

Make a piece of clothing that would protect against rain.

Potato Pulley

Jamie O'Rourke

What is a pulley?

Parts of a pulley

Instructions

- Stick the pipe cleaner in the holes on top of the cup and twist it around the ends to make a "handle."
- Tie one end of the yarn to the handle.
- Tie the other end of the yarn to the potato.

My potato pulley

Potato Pulley

Jamie O'Rourke and the Pig Potato

Vocabulary Cards

Simple machine

basic device that applies force

pulley

CLOUD VIEWER

cumulus **stratus**

cirrus **cumulonimbus**

Condensation

the conversion of vapor or gas to a liquid

precipitation

rain, snow, sleet, or hail that falls to the ground

forecast

a prediction or estimation of upcoming weather

LESSON PLAN

Images for "clouds" and "precipitation" are used to describe how clouds appear different from the weather changes. Clouds similarities and differences between different types of clouds and how clouds change.

Jamie O'Rourke and the Pig Potato

Maker Task Cards

Use the following task cards in a Makerspace or with STEM Pins for students to make more creations.

Make a vehicle that can pull a potato.

Make a device to help harvest crops.

Make a container that holds the most pennies.

Make a trap for a leprechaun.

POTATO PULLEY

The Bee Tree

Maker Task Cards

Use the following task cards in a Makerspace or with STEM Pins for students to make more creations.

Make up a new recipe that uses honey.

Make a poster about the life cycle of a bee.

Make a model of honeycomb.


Make a model of a bee hive.

Quick & Effective ELA Activities

GUESS A DOODLE

*Put students in pairs or groups of two or three. One person draws a card from the stack or face-down vocabulary words. He or she draws a doodle that would help their partner(s) guess the word. Once the person has guessed the word, the students trade roles.

*Feel free to use the recording sheet on the next page OR to save paper, have students use i-pads or whiteboards!




prediction abandon
incider necessities

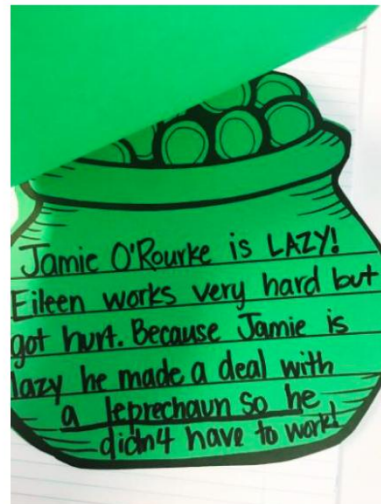
Cause and Effect

the **cause** is **WHY** something happens and the **effect** is the **RESULT**.

cause




effect



Jamie O'Rourke is LAZY!
Eileen works very hard but got hurt. Because Jamie is lazy he made a deal with a leprechaun so he didn't have to work!

Exaggeration

A statement that makes something sound much better or worse than it really is.



word: coat tails

think it means

*the bottom of his jacket.
*the picture helped too!

Printable Anchor Charts, Vocabulary Cards, High Flyer Extension Charts & Exit Slips

*the crowd was loud.
*The janitor was shocked.
*The players scrambled a lot to get the ball.

Facts

BASKETBALL BELLES

1890 Stanford vs Berkeley
1960 Unlimited dribbling
1973 Basketball Scholarships for Women
1997 WNBA

ponder
to think about

scamper
to run with quick light steps

preserve
to protect something to keep it from changing

outsmart
tricking someone by being clever