

# Jack and the Beanstalk - Measurement Center Ideas

## Summary

The story of Jack and the Beanstalk naturally supports the following learning centers: Weight Measurement, Money, Art, Nonstandard Length Measuring, Problem Solving, Music, and Reading / Writing.

## Main Core Tie

Mathematics Kindergarten

[Strand: MEASUREMENT AND DATA \(K.MD\) Standard K.MD.1](#)

## Additional Core Ties

Mathematics Kindergarten

[Strand: MEASUREMENT AND DATA \(K.MD\) Standard K.MD.2](#)

Mathematics Kindergarten

[Strand: MEASUREMENT AND DATA \(K.MD\) Standard K.MD.3](#)

## Materials

- [Jack and the Beanstalk Measurement Center Ideas](#) (pdf)

### Weight Measurement Center

- Balance and oz. weight scales

- Dry beans

- Pencil and paper

- Plastic eggs

### Money Center

- Plastic dimes, nickels, quarters, pennies

- Cash register

- Money stamps

- Adding machine paper and scissors or cut pieces of paper for receipts

- Pencils

- Black, red, pinto and white beans and a sign stating the name of the beans and the price and name of coin for each bean with a picture of the bean and coin for each

### Art Center

- Paint mixtures of tints and shades of yellows

- Other paints and pallets for mixing

- Large egg shapes cut from cardstock for tracing

- Paint paper

- Paint brushes

- Coffee filters

- Eye droppers

- Ruler or measuring tape

- Straw sections for blowing colors

- Pencils

### Nonstandard Length Measuring Center

- Pieces of paper with measurements written on them from 3" to 11"

- Copy machine paper for each student

Scissors  
Markers  
Crayons  
Tape  
Nonstandard objects for measuring  
Blocks

#### Problem Solving Center

Pictures of bare deciduous trees to use for measuring the trunk length and width  
cm rulers  
Inch rulers  
Pictures of beanstalks from picture books

#### Music Center

Ukulele, guitar, autoharp, if there is an adult in the center to assist  
1" x 6" x 12" wood blocks, nails placed 2" apart along the bottom edge and on a slant 2" apart along the top edge  
Elastics to fit the wood blocks  
Clear glass containers with water at different levels  
Spoons  
Rulers  
Paper and pencils

#### Reading/Writing Center

- [The Big Stem book](#) (pdf)
  - [Days of the Week: Beanstalk Story](#) (pdf)
- Charts and manipulative pieces from class shared-readings  
Books from class shared-readings  
Idea page  
Crayons  
Markers  
Pencils  
Paper

#### Instructional Procedures

##### Weight Measurement Center:

The "golden eggs" from the giant's goose

Fill "golden" plastic eggs with differing numbers of beans. Tape the two sides together.

Students place beans in the "not yellow eggs" of the same size and try to balance them with the "golden" eggs by adding and subtracting beans. They count the beans after the eggs balance to determine how many beans are in the sealed yellow egg.

Emphasize comparison words: larger, smaller, heavier, lighter, more, less.

##### Money Center:

The bags of coins from the giant's treasury

Buy beans. Choose one bean at a time (white beans = 1¢, pinto beans = 5¢, red beans = 10¢, black beans = 25¢). Choose the appropriate coinage for the bean from a container of play money.

Stamp a receipt with correct coin stamp and write the name of the coin on the receipt.

Key in the proper coin amount for advanced students and place money in the cash register.

Students rotate through each step, taking turns as they walk around the table buying beans.

Students who are ready for addition and subtraction can purchase several beans at a time or

take large coinage and make change at the register.

#### Art Center: Yellow Color-Family Experimentation

Paint stripes of warm colors, or shades and tints of yellow, on a large egg shape. Measure each stripe with a string. How long is it? How wide is it?

Do straw blowing art with gold tints and shades. Using nonstandard objects, measure how long the lines are from the bottom to the top.

Drop shades and tints of any one color family on a coffee filter with eye droppers. The next day draw and cut egg shapes of different sizes from the filters or use colored construction papers from a color family. Glue them in order from largest to smallest on a piece of paper and measure how long and wide each one is. Write the measurement on the paper next to each egg.

#### Nonstandard Length Measuring Center: Class Add-on Giant Beanstalk

Make a group giant beanstalk. Each person picks a paper that tells how much of the beanstalk s/he should draw. The student measures that distance on a piece of construction paper from the bottom of the paper to the top of his/her measurement, then draws the beanstalk and writes his/her name on it and how long it is (six links, two pencils, etc.).

Each child then cuts his/her beanstalk piece off at the top and connects it with tape to the portion of the beanstalk that has been completed.

When they are done, students work together to make a beanstalk out of blocks lying down.

Measure it and put it away before leaving the center.

After everyone has visited the center, measure the beanstalk as a group activity. How long is it?

How wide is it at different points? Use string, links, etc., to measure the class beanstalk.

#### Problem Solving Center:

Look at pictures of bare deciduous trees. Are the trunks the same width at the bottom as at the top? Why? Where do the trunks end? How do they compare with the beanstalk in the picture books? Is the beanstalk a tree?

#### Music Center: The Golden Harp--Long and Short Strings/ High and Low Sounds

Make and play instruments made from elastics and wood blocks. Measure how long the strings are. Do the longer strings make higher or lower sounds?

Measure and play auto harp strings, guitar or ukulele strings, etc.

Use a spoon to tap cups of water more full and less full. (About 1", 3", 5", and 7" of water in four clear cups.) Measure the water with snap-together cubes. Is the sound higher or lower? Why?

Play fast, slow, loud and soft on each instrument. Which ones are the loudest? Why?

Have a harpist come in and play, if possible, for a whole group activity.

#### Reading/Writing Center

Read [The Big Stem book](#) (pdf) about Jack and illustrate it.

Read the [Days of the Week: Beanstalk Story](#) (pdf). Highlight the day of the week on each page, both on the calendar heading and in the text. Illustrate the book.

Contribute to making a class book from the story. Make a page showing something you can measure in the story and write a sentence about it. ("I can weigh the eggs." or "I can measure the beanstalk." or "I can measure the giant," etc.)

#### Authors

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