



## HOW MANY METRES? – Measurement, Texture, Contrast

Students glue metre long pieces of yarn to construction paper to make a picture of a flower, and then take turns estimating how many metres it took to make each image.

Required Time

80 Minutes

Grade Level

Grade 1 to Grade 3

Subject

Language Arts  
Mathematics  
Science  
Visual Arts

Vocabulary

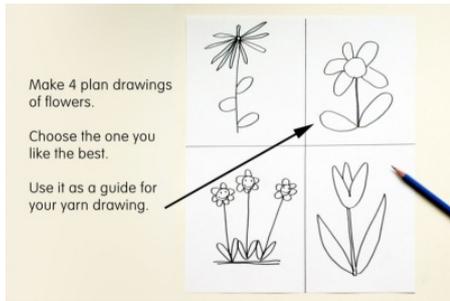
contrast  
estimate  
metre  
texture

Materials

Crayola Washable No-Run Glue  
Crayola Scissors  
Crayola Construction Paper - 22.9 cm x 30.5 cm (9" x 12") - 1 per student  
Metre Stick of Tape Measure  
Toothpicks  
Yarn  
Hole Punch - 1 per group of 6 students  
Googly Eyes (optional)

Shop Crayola  
Products

# Steps



## Step One

1. Make 4 different plan drawings of flowers.
2. Choose the one you like the best.
3. Use it as a guide for your yarn drawing.



## Step Two

1. Measure and cut yarn into pieces that are 1 metre long.



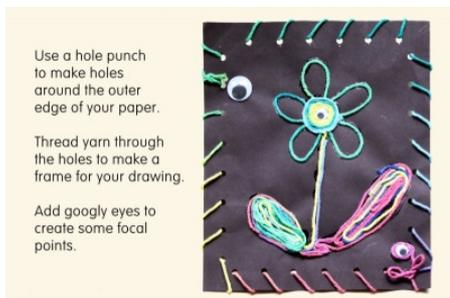
## Step Three

1. Draw part of the flower with the glue.
2. Use your plan drawing as a guide.



## Step Four

1. Place the yarn on top of the glue.
2. Gently press it into place with a toothpick.
3. Continue in this way until you finish making the whole flower.
4. Remember to keep track of how many metres of yarn you use.
5. Make sure you keep the number a secret.



## Step Five

1. Use a hole punch to make holes around the outer edge of your paper.
2. Thread yarn through the holes to make a frame for your drawing.
3. You may want to add some googly eyes.

Write the number of metres you used to make your drawing on the back of the paper.

Cover the number with a sticky note to keep it a secret.



## Step Six

1. Write the number of metres you used to make your drawing on the back of the paper.
  2. Cover the number with a sticky note to keep it a secret.
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# Learning Goals

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Students will be able to:

- create a yarn drawing that demonstrates 3 characteristics of a flower;
- use yarn and contrast to create texture;
- measure and estimate metre lengths of yarn;
- demonstrate technical accomplishment and creativity;
- support their ideas with evidence found in the artworks.

## Extensions

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Have students:

- gather a variety of objects and materials to use in a mixed media artwork;
- measure and record the length of each item;
- use the materials to create an artwork on a topic of their choice;
- record the number of lengths of 3 of the materials they started with, and the number of lengths they ended up using of each of the 3 materials;
- share their work with others.

## Prepare

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1. Prior to this lesson provide time for students to practice measuring using non-standard measurement tools, for example,
  - *Demonstrate how to make accurate linear measurements.*
  - *Provide strips of paper, tubes, chains of paper clips and lengths of ribbon of various lengths.*
  - *Have students find things in the classroom that are the same length as the various measuring tools.*
  - *Have them use a chart to record the items they find that are the same length as specific tools.*
2. Prior to this lesson introduce or review characteristics of flowers and have students observe, draw and compare different flowers.
3. Gather, and make available, books about flowers, for example, *Wildflowers, Blooms & Blossoms (Take Along Guides)*, by Diane Burns; *Time For Kids: Plants!*, by Editors of TIME For Kids, and Brenda Iasevoli; *National Geographic Readers: Seed to Plant*, by Kristin Baird Rattini; *Planting a Rainbow*, by Lois Ehlert; *The Tiny Seed*, by Eric Carle; and *The Reason for a Flower: A Book About Flowers, Pollen, and Seeds (Explore!)*, by Ruth Heller.
4. Download and display the Texture and Contrast posters available on this website.  
Posters

## Introduction

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1. Conduct a read-aloud with a picture book such as *Planting a Rainbow*, by Lois Ehlert.
2. View and discuss the images and the characteristics of flowers.
3. Have students compare the different shapes found in the illustrations.
4. Introduce the challenge.

## Activities

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### The Challenge

1. Create a yarn drawing that demonstrates 3 characteristics of a flower.
2. Use yarn and contrast to create texture.
3. Measure and estimate metre lengths of yarn.
4. Demonstrate technical accomplishment and creativity.
5. Support your ideas with evidence found in the works.

### The Process

1. Make sure that everyone understands the challenge.
2. Establish success criteria with your students, for example,  
I know I am successful when I have:
  - *measured lengths of yarn carefully*
  - *shown 3 characteristics of flowers*
  - *glued the yarn carefully*
  - *counted number of metres correctly*
  - *kept the paper in good condition*
3. Guide the students through the steps outlined in the lesson plan.
4. Observe students as work.
5. Provide individual assistance and encouragement.

## Sharing

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1. Place students into small groups.
2. Ask them to:

- *Share their work and estimate how many metres of yarn were used in each picture.*
  - *Explain their process for estimating the number of metres in each picture.*
  - *Discuss the things that are especially effective in the drawings and why.*
  - *Talk about what they found difficult and what they found easy to do.*
3. Share ideas with the whole class.
  4. Ask students to tell how they felt about doing this project.

## Assessment

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1. Observe students as they work – thoughtful focus, discriminating, seeking more information, elaborating, experimenting
2. Observe students as they discuss the art works – active listening, insightful contributions, supporting ideas with evidence found in the artwork and from personal experience.
3. Use a checklist to track progress. (Downloads – Metres\_tracking.pdf)
4. Have students use the self-assessment form to evaluate their work. (Downloads – Metres\_self-assessment.pdf)