K-2 Measurement Activities/Centers

| Activities | K | 1 | 2 | Notes | Tools |
|--|---|---|---|---|---|
| Constellations | X | X | X | | Ruler Objects used to measure Construction paper Star stickers Pencil |
| Abstract Art | X | X | X | | 2 number cubes Ruler Objects used to measure Construction paper Colored pencils Pen or sharpie Pencil |
| Measurement Jeopardy Website (2 nd) whole group | | X | X | Website https://jeopardylabs.com/play/2nd- grade-measurement3 | Teacher's Laptop ActivePanel |
| Estimate to Dominate | X | X | X | Whole group-teams | White boards Markers Erasers Something to keep track of points |
| Measurement Olympics | X | X | X | Centers | Olympic cards and materials in the activities |
| Measure It | X | X | X | | Recording sheet |
| Shorter/Longer | X | X | | | Recording sheet |
| Measurement Number of the Day | X | X | X | Whole group or centers | |
| Estimation Station | X | X | X | | Cuisenaire Rods Recording Sheet |
| Shorter or Longer | X | X | | | Cuisenaire Rods Spinner |
| Playdoh Snakes | X | X | X | | Playdoh Timer Ruler Objects used to measure Recording sheet Pencil |
| Estimate Lengths | | | X | Toolbox | |
| Measure Lengths of Objects | | X | X | Toolbox | |

| Activities | K | 1 | 2 | Notes | Tools |
|----------------|---|---|---|-----------------------------|-------------------------|
| Measure and | X | X | | Toolbox | |
| Match | | | | | |
| Measure | X | | | Toolbox | |
| Lengths | | | | | |
| Shorter and | X | | | Toolbox | |
| Longer Objects | | | | | |
| Measure the | | X | X | Toolbox | |
| Length in | | | | | |
| Inches | | | | | |
| Length Vocab | X | X | | Toolbox | |
| Roll for the | | X | X | B&E Game (2 nd) | Ruler |
| Gold | | | | | Number cube |
| Building | X | | | B&E Game (K) | Connecting Cubes |
| Towers | | | | | Spinner 1-10 |
| Race to Get 50 | X | X | X | "Cuisenaire Rods" Tab | Cuisenaire Rods |
| or 100 | | | | | Meter Stick |
| Cautinastan | | | X | B&E Game | Number Cube Number Cube |
| Centimeter | | | Λ | b&E Game | Pencil |
| Maze | | | | | Ruler |
| Wormy | X | X | | B&E Game | Game cards |
| Measurement | | | | | |
| Three Act | X | X | X | "Three Act Task" Tab | |
| Task: Little | | | | | |
| Sister | | | | | |
| Three Act | X | X | | "Three Act Task" Tab | |
| Task: | | | | | |
| Shark Bait | | | | | |
| Tricky | X | X | X | Whole group | Ruler or other units |
| Measuring | | | | | |
| Broken Ruler | | X | X | Center | Hang cards up |
| | | | | | Recording Sheet 1-18 |

Dots:

Blue-2nd Green-1st Red-K

Abstract Art

What you need:

A piece of construction paper 2 number cubes (dice) A Ruler Pencil Fine point sharpie or pen Colored pencils or crayons



- 1. This is an independent activity.
- 2. Roll the two number cubes.
- 3. Add the numbers together- This will be the length of your line in centimeters or inches.
- 4. Make a line anywhere on your paper.
- 5. Label the line with the appropriate units (centimeters or inches).
- 6. Continue with steps 1-5 until you have at least 12 lines.
- 7. Trace over each label with a pen or fine point sharpie.
- 8. Color your artwork 3

Extension: What shapes did your lines make? How many of each shape are there? What kinds of angles do you see?
I am successful when I can use a ruler to measure lengths starting at the zero mark.

☐ I can count centimeters or inches to determine the overall length of an object.

☐ I can explain that length is the distance from one point to another.

Abstract Art

What you need:

A piece of construction paper 2 number cubes (dice) A Ruler Pencil Fine point sharpie or pen Colored pencils or crayons



- 1. This is an independent activity.
- 2. Roll the two number cubes.
- 3. Add the numbers together- This will be the length of your line in inches.
- 4. Make a line anywhere on your paper.
- 5. Label the line with the appropriate units (inches).
- 6. Continue with steps 1-5 until you have at least 12 lines.
- 7. Trace over each label with a pen or fine point sharpie.
- 8. Color your artwork 😂

Extension: What shapes did your lines make? How many of each shape are there? What kinds of angles do you see?

| I am successful when I can use a ruler to measure lengths starting at the zero mark. |
|--|
| I can count centimeters or inches to determine the overall length of an object. |
| I can explain that length is the distance from one point to another. |

Abstract Art

What you need:

A piece of construction paper 2 number cubes (dice)
A Ruler
Square Tiles
Pencil
Fine point sharpie or pen
Colored pencils or crayons

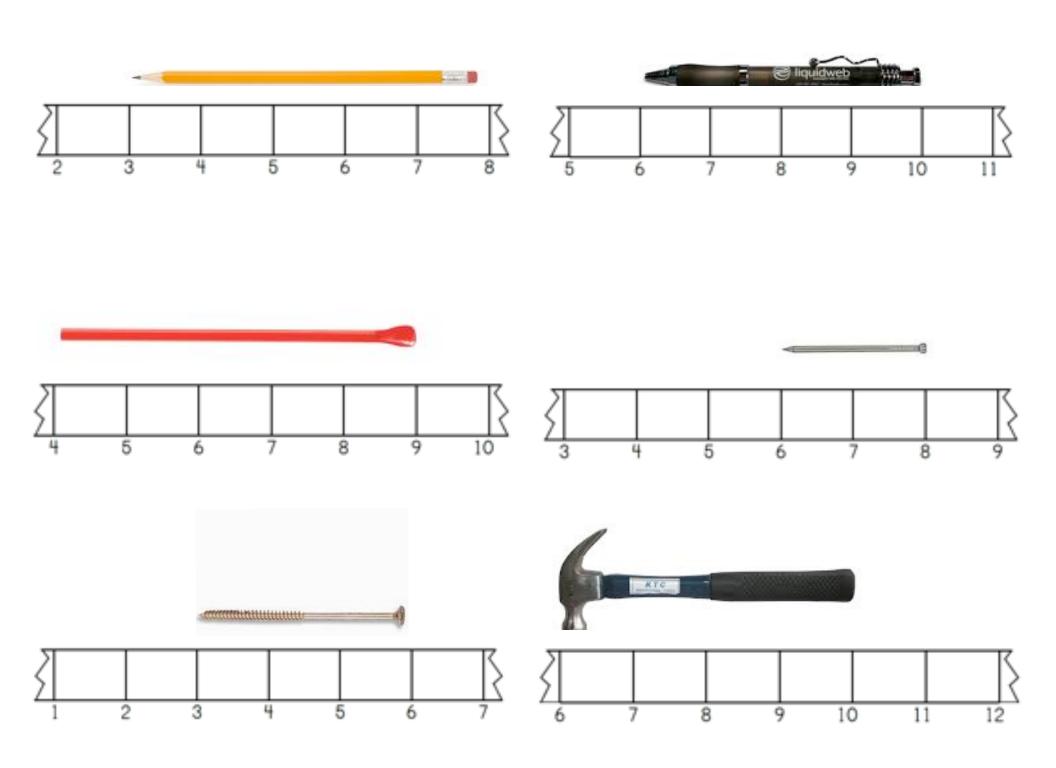


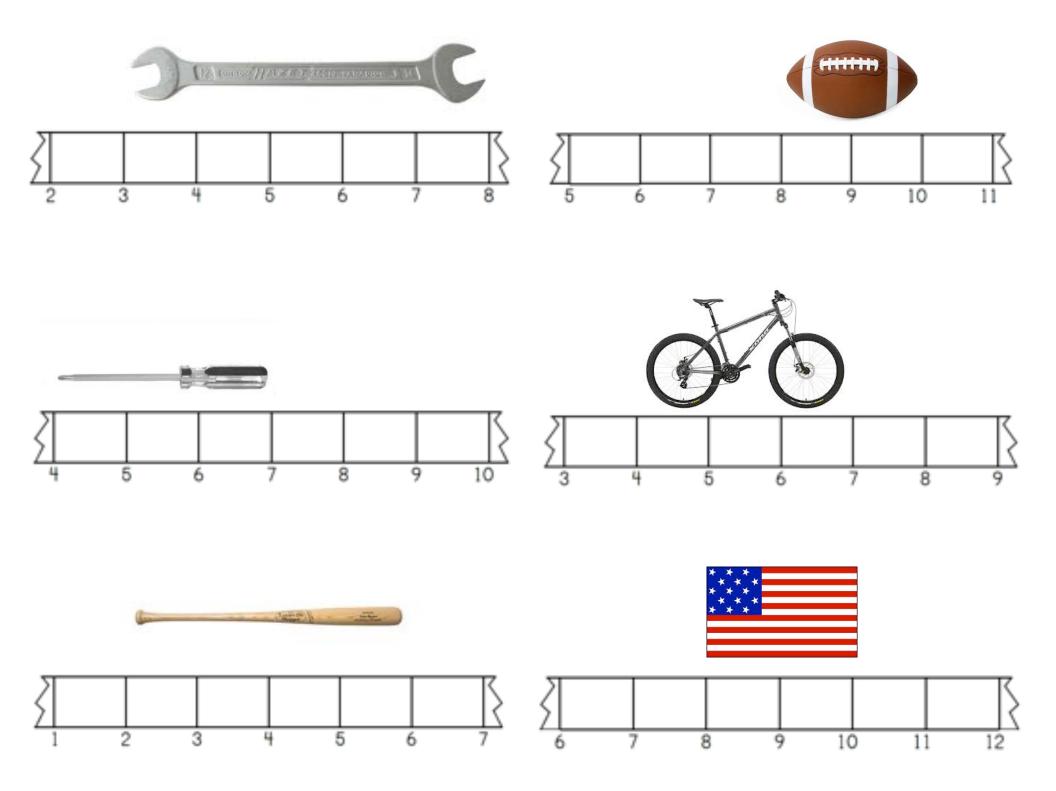
- 1. This is an independent activity.
- 2. Roll the two number cubes.
- 3. Add the numbers together- This will be the length of your line in square tiles.
- 4. Put the amount of square tiles together without any gaps to form a line with the top of the square tiles.
- 5. Trace the line on the top of the square tiles.
- 6. Label the line with the appropriate units (units).
- 7. Continue with steps 1-6 until you have at least 12 lines.
- 8. Trace over each label with a pen or fine point sharpie.
- 9. Color your artwork 😂

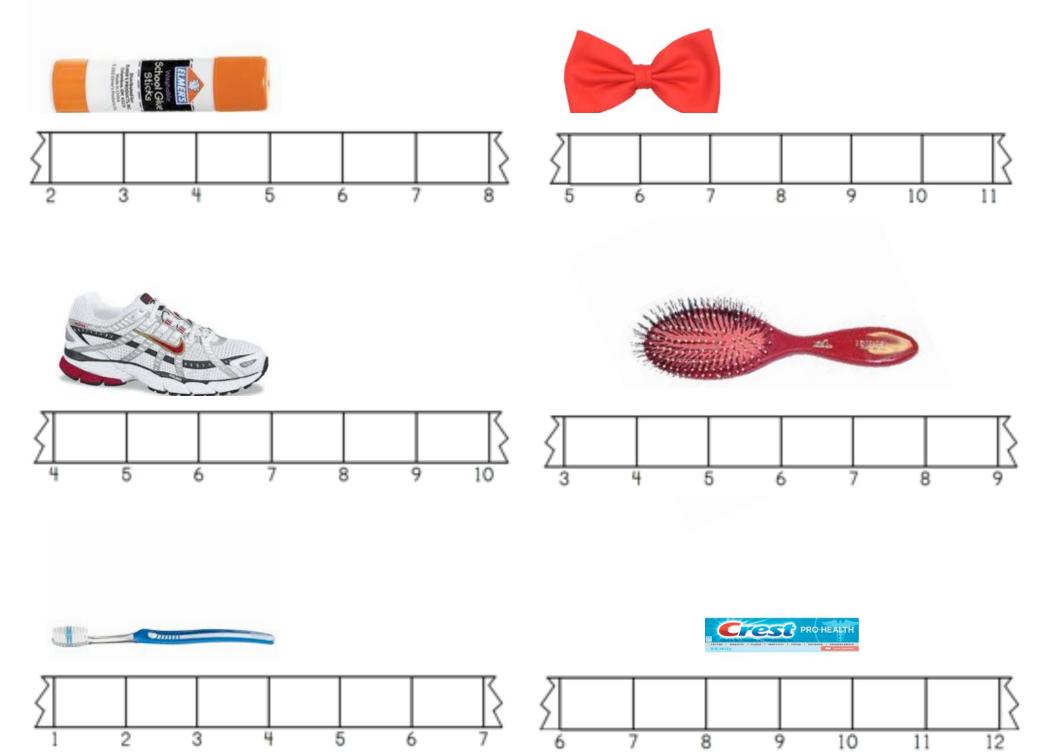
Extension: What shapes did your lines make? How many of each shape are there?

I am successful when:

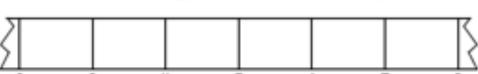
| an baccessian when. |
|--|
| ☐ I can explain that length is the distance from one point to another. |
| ☐ I can line up objects I am using to measure correctly (no gaps, starting and ending point) |
| ☐ I can count to determine the overall length of an object. |
| ☐ I can tell you how long an object is using different tools to measure. |
| ☐ I can explain how to measure the length of an object using different tools. |
| |





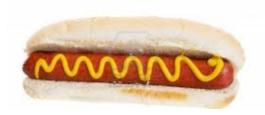






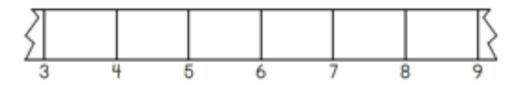








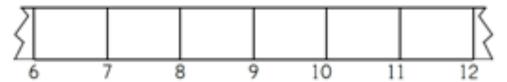












Constellations Measuring to the Nearest Centimeter or Inch

What you need:

A piece of construction paper 12 star stickers A Ruler



- 1. This is an independent activity.
- 2. Put your 12 star stickers to form a design across your paper.
- 3. Use your ruler to make a line from star to star (you only need one line to connect one star to another)
- 4. Measure the line to the nearest centimeter or inch and label it in the middle of the line.

| I am successful when I can use a ruler to measure lengths starting at the zero mark. |
|--|
| I can count centimeters or inches to determine the overall length of an object. |
| I can explain that length is the distance from one point to another. |

Constellations Measuring to Nearest Inch

What you need:

A piece of construction paper 12 star stickers A Ruler



- 1. This is an independent activity.
- 2. Put your 12 star stickers to form a design across your paper.
- 3. Use your ruler to make a line from star to star (you only need one line to connect one star to another)
- 4. Measure the line to the inch and label it in the middle of the line.

I am successful when I can:

| I can use a ruler to measure lengths starting at the zero mark. |
|---|
| I can count inches to determine the overall length of an object. |
| I can explain that length is the distance from one point to another |

Constellations

What you need:

A piece of construction paper 12 star stickers Paper clips, square tiles, other objects to measure with



- 1. This is an independent activity.
- 2. Put your 12 star stickers to form a design across your paper.
- 3. Use your objects to make a line from star to star without any gaps (you only need one line to connect one star to another)
- 4. Measure the line and label it in the middle of the line.

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|---|----|------------|---------|
| | am | successful | when. |
| | am | Successiul | WIICII. |

| ☐ I can explain that length is the distance from one point to another. | |
|--|------------------|
| ☐ I can line up objects I am using to measure correctly (no gaps, starting and | d ending point). |
| ☐ I can count to determine the overall length of an object. | |
| ☐ I can tell you how long an object is using different tools to measure. | |
| ☐ I can explain how to measure the length of an object using different tools. | |

Estimate to Dominate

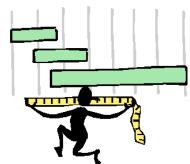
Set up:

Students should be in teams of four or more.

Number each team member (1-4 or more)

Each team needs one white board, marker, and eraser

Teacher-questions need to be thought up ahead of time



Materials:

Each team-white board, marker, eraser
Teacher-Something to keep score
Measuring tools (depending on the grade level and what you want to measure with)

The **goal** of the game is for one player per team to make the best and closest estimate for the measurement given by the teacher.

Rules:

- Person number 1 stands up at each table.
- The teacher says an object and measuring tool.
- Person number 1 writes down their measurement and units on their board and turn over.
- The teacher has all students show their boards at the same time.
- The teacher picks one person to measure the object with the appropriate tool.
- The team closest to the measurement gets one point.
- Play as many times as you want, changing the tool as needed.

| Examples of questions: (inches, feet, yards, meters, centimeters, paperclips, square tiles, etc.) |
|--|
| What is the measurement of the width of the board in? |
| What is the measurement of the width of the door in? |
| What is the measurement of the height of the computer screen in? |
| I am successful when: I can tell the best type of measuring tool to use to measure different sized-objects. I can identify objects that would be measured using length. I can explain why I chose the unit of measurement I used to measure an object. I can estimate the length of an object in inches, feet, or yards; centimeters or meters. I can explain how the size of the unit I use to measure affects the amount of units measured. |

| | pirections- |
|------|-------------|
| Name | |

measure five objects in our classroom. Show your work below.





Measurement Tool-Ruler

| 0b ject | Estimate | Actual Measurement |
|---------|----------|--------------------|
| | | |
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| | | |
| | | |
| | | |
| | | |
| | | |

| name | | | | |
|---------|----------|--------------------|--|--|
| 0b ject | Estimate | Actual Measurement | | |
| | | | | |
| | | | | |
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Measurement Number of the Day

Directions: Use one of the following or create your own to determine the "Measurement" Number of the day:

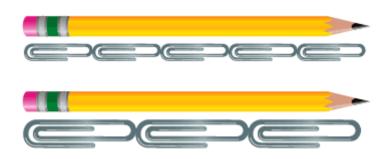
- Roll one or two number cubes and add them together
- Make an equation with an unknown
- Make a riddle
- Pull a number out of a bag or hat
- Mystery reveal a number from behind a picture on a flipchart

Once the number is determined:

- 1. Teachers determine what units the measurement will be in (ex. If the number is 8, will it be 8 connecting cubes, 8 linking chains, 8 inches, etc)
- 2. Students estimate at their seats what things in the room will be the same length, shorter than, or longer than their number.
- 3. Students go on a scavenger hunt to measure, draw a picture, and label things in their chart in the appropriate column.

Differentiate-teachers give tables/students different measuring units

| I can describe the measurable attributes for a given object. |
|---|
| I can explain what shorter, longer, and taller mean |
| I can tell which object is shorter or longer. (length) |
| I can tell which object is shorter or taller. (height) |
| I can estimate the length an object is in inches, feet, centimeters, or meters. |
| I can use a ruler to measure lengths starting at the zero mark. |
| I can count inches to determine the overall length of an object. |
| I can explain that length is the distance from one point to another. |



| Shorter | | | |
|---------|---------|--------|--|
| | Same As | Longer | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Actual: | | | |
| Shorter | Same As | Longer | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Name:



Playdoh Snakes Recording Sheet

| | Person 1: | Person 2: | Person 3: | Person 4: | How much longer is the longest than the shortest? |
|------------------|-----------|-----------|-----------|-----------|---|
| 1 st | | | | | |
| 2 nd | | | | | |
| 3 rd | | | | | |
| 4 th | | | | | |
| 5 th | | | | | |
| 6 th | | | | | |
| 7 th | | | | | |
| 8 th | | | | | |
| 9 th | | | | | |
| 10 th | | | | | |

If you put the lengths of all the longest snakes together to make one LONG snake, how long would it be? Show your work:

Playdoh Snakes

A game for 2 or more people

What You Need:

A timer

A ruler

One recording sheet with everyone's names written on it Each person needs a little tub of playdoh and pencil



- 1. Take your playdoh out of your tub.
- 2. One person sets the timer to 1 minute.
- 3. When the timer starts, each person rolls their playdoh into the longest snake possible without breaking until the timer goes off.
- 4. Each person measures their snake in centimeters or inches (all agree before measuring).
- 5. Write your measurements down on the recording sheet and answer the question.
- 6. Play again 9 more times.
- 7. Answer the last question on the sheet.

| I am successful when I can use a ruler to measure lengths starting at the zero mark. |
|---|
| I can count centimeters or inches to determine the overall length of an object. |
| I can explain that length is the distance from one point to another. |
| I can determine and write how much longer one object is than another in the amount of |
| inches or centimeters. |
| I can solve the measurement problem using measuring tools, pictures, numbers, or words. |
| I can write equations to represent my thinking, including a symbol for what is unknown. |

Playdoh Snakes

A game for 2 or more people

What You Need:

A timer

A ruler

One recording sheet with everyone's names written on it Each person needs a little tub of playdoh and pencil



- 8. Take your playdoh out of your tub.
- 9. One person sets the timer to 1 minute.
- 10. When the timer starts, each person rolls their playdoh into the longest snake possible without breaking until the timer goes off.
- 11. Each person measures their snake in inches.
- 12. Write your measurements down on the recording sheet and answer the question.
- 13. Play again 9 more times.
- 14. Answer the last question on the sheet.

| I am successful when I can use a ruler to measure lengths starting at the zero mark. |
|---|
| I can count inches to determine the overall length of an object. |
| I can explain that length is the distance from one point to another. |
| I can determine and write how much longer one object is than another in the amount of |
| inches. |
| I can solve the measurement problem using measuring tools, pictures, numbers, or words. |
| I can write equations to represent my thinking, including a symbol for what is unknown. |

Playdoh Snakes

A game for 2 or more people

What You Need:

A timer

Tools to measure

One recording sheet with everyone's names written on it Each person needs a little tub of playdoh and pencil



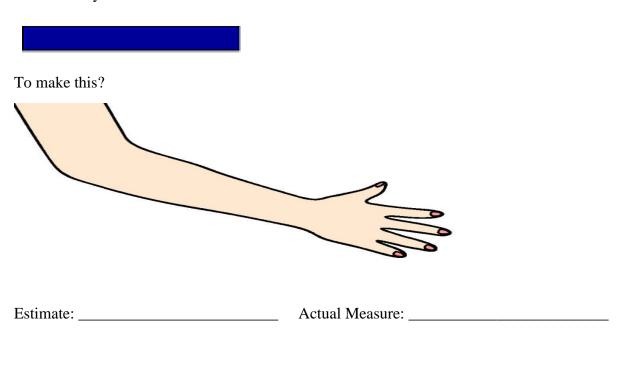
- 1. Take your playdoh out of your tub.
- 2. One person sets the timer to 1 minute.
- 3. When the timer starts, each person rolls their playdoh into the longest snake possible without breaking until the timer goes off.
- 4. Each person measures their snake using the same tools.
- 5. Write your measurements down on the recording sheet.
- 6. Put your snakes in order from shortest to longest.
- 7. Play again 9 more times.

| I am successful when | Ι | am | successful | when |
|----------------------|---|----|------------|------|
|----------------------|---|----|------------|------|

| I can explain that length is the distance from one point to another. |
|---|
| I can line up objects I am using to measure correctly (no gaps, starting and ending point). |
| I can count to determine the overall length of an object. |
| I can tell you how long an object is using different tools to measure. |
| I can explain how to measure the length of an object using different tools. |
| I can tell which object is shorter or longer. |

Estimation Station

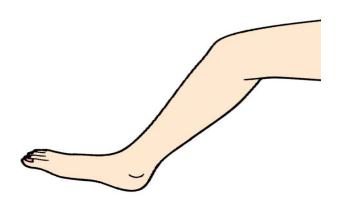
1. How many of these.....



2. How many of these.....



To make this?

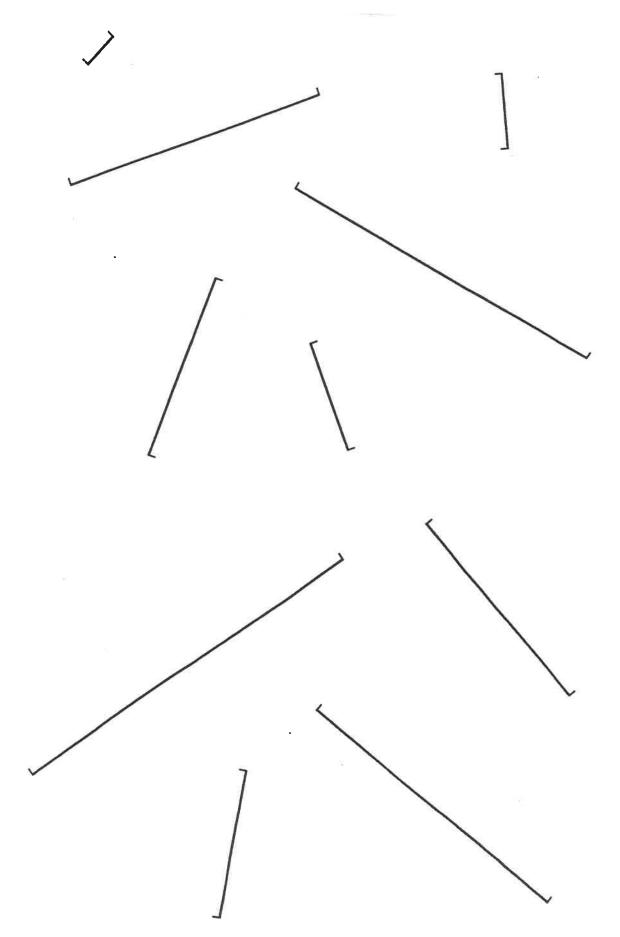


Estimate: _____ Actual Measure: ____

| 3. How many of these | |
|----------------------|-----------------|
| | |
| To make this? | |
| | |
| Estimate: | Actual Measure: |
| | |
| 4. How many of these | |
| | |
| To make this? | |
| | |
| Estimate: | Actual Measure: |

Estimate the length of each line

Check your estimate using Cuisenaire rods. How long is each line?



Check your estimate using Cuisenaire rods. How long is each line?

Estimate the length of each line

Estimate the length of each line

Check your estimate using Cuisenaire rods. How long is each line?

