

Measurements About YOU! **Line Master 1**

(Assessment Master)

Name: _____

Estimate, Measure, and Compare Attributes	Not observed	Sometimes	Consistently
Uses familiar referents to estimate measures			
Estimates, measures, and compares length			
Estimates, measures, and compares mass			
Estimates, measures, and compares capacity			
Estimates, measures, and compares area			
Identify and Relate Measures			
Selects appropriate units for measuring			
Compares and relates linear measures			
Relates millilitres to litres			
Relates grams to kilograms			

Strengths:

Next Steps:

Line Master 2-1



Create a letter using this template and select one or two activities from the suggestions on the next page. Simply **delete these instructions and cut and paste the activities you have selected**, adapting them to fit your needs.

Connecting Home and School

Line Master 2–2

Dear Family:

We have been working on ***Measurements About YOU!***, which engages children in conversations, investigations, and activities that help to develop their understanding of the big math idea that “Units can be used to measure and compare attributes.” Particular focus is placed on estimating, measuring, and comparing length, mass, capacity, and area. Try this activity at home.



Reading the Story: As you read, ask your child to share what he/she finds to be an interesting measurement. Together, you might estimate, measure, and compare the heights of different family members. You also might pull strands of hair from willing family members and then estimate, measure, and compare hair length.



Litres and Kilograms: What can you find at home with a measure of 1 litre (L) or 1 kilogram (kg)? Encourage your child to search the refrigerator and cupboards to find containers that hold 1 L, as well as for packages that have a mass of 1 kg. Have your child draw, photograph, and/or list what she/he finds and bring these findings to class by (date).



Finding Benchmark Lengths: Encourage your child to search for and record items that have a length close to or exactly 1 centimetre (cm), 10 cm, and 1 m. Please ensure your child brings her/his findings to class by (date).



Personal Measures: The book begins with the character sharing birth measures. If you have such records about your child, you might share them with her/him. If you have records from annual doctor checkups, your child may be interested in seeing those, as well. You can talk about growth and together make some predictions.

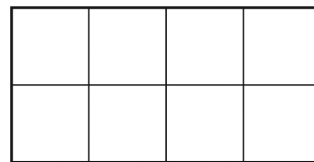


Sincerely,

Measurements About YOU! Line Master 3

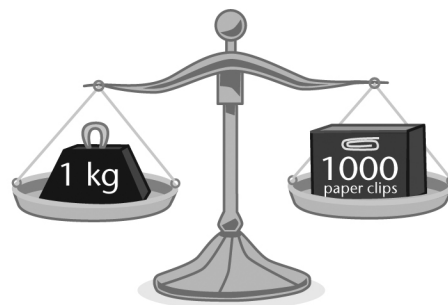
Math Mat

area: the amount of space a shape covers.
We measure area in square units. The area of the rectangle at right is 8 square units.



centimetre (cm): a unit to measure length.
The line shown is 1 cm long. _____

gram (g): a unit to measure mass.
A small paper clip has a mass of *about* 1 g.



kilogram (kg): a unit to measure mass.
There are 1000 g in 1 kg.

kilometre (km): a unit to measure distance.
There are 1000 m in 1 km.

litre (L): a unit to measure capacity.
A large bottle of water might hold 1 L.



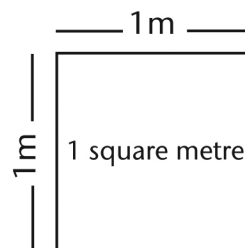
metre (m): a unit to measure length.
There are 100 cm in 1 m.

millilitre (mL): a unit to measure capacity.
A teaspoon holds *about* 5 mL.
There are 1000 mL in 1 L.

millimetre (mm): a unit to measure length.
The line shows 1 cm divided into 10 mm.



square metre: the space covered by a square with sides that are each 1 m long.



Comparing Body Lengths

Line Master 4

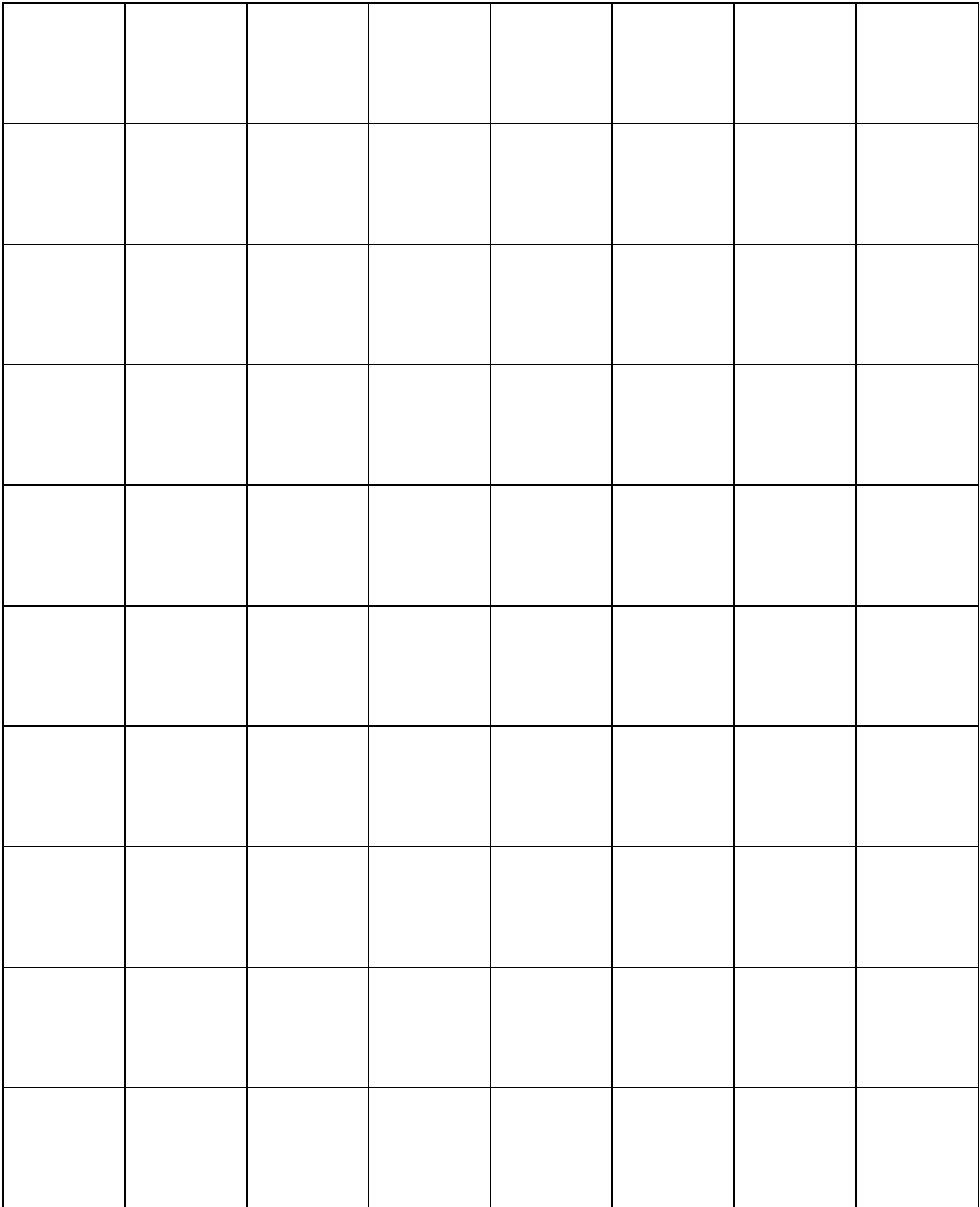
Name: _____

I am comparing	My estimate	My measure	I found out that...
leg length			
to			
arm length			
to			
to			
to			

Grid Paper

Line Master 5-1

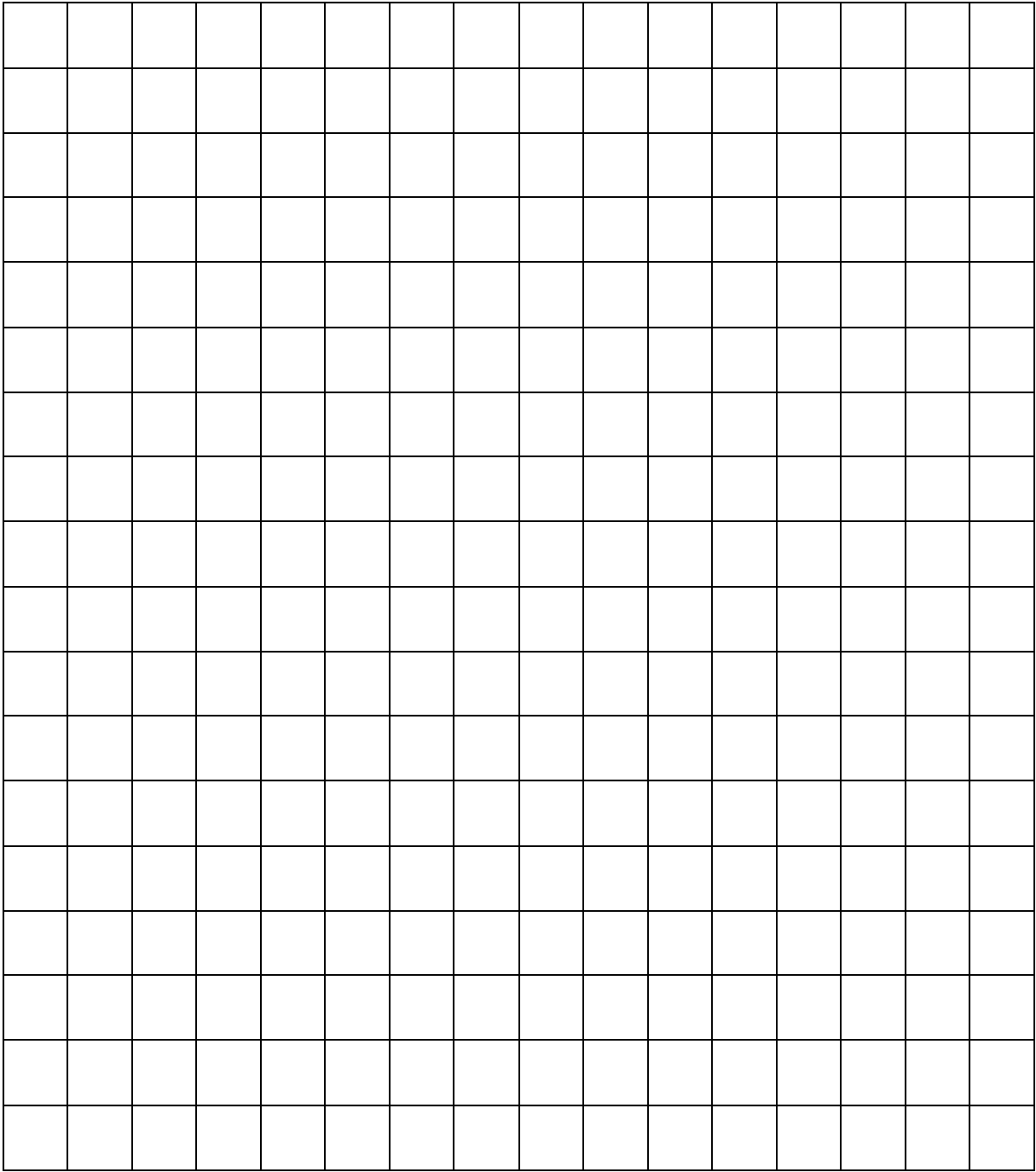
2 Centimetre



Grid Paper

Line Master 5-2

1 Centimetre



Measuring Lengths

Line Master 6

Name: _____

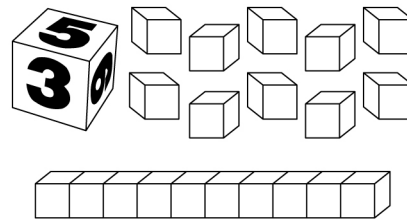
I am measuring	My estimate	My measure

Make a Metre

Line Master 7-1

What you need:

- number cube
- Base Ten unit cubes and rods



How to Play

- Take turns rolling the number cube. Take that number of cubes or rods. For example, if you roll 5:
 - You can take 5 cubes to make a length of 5 cm.
- OR
- You can take 5 rods to make a length of 50 cm.
- Whenever you have 10 unit cubes, trade them for 1 rod.
- Record each turn. After 7 turns, stop and find your total length. The player closest to 1 m scores 1 point. Getting 1 m exactly scores 2 points. Here is an example of how to record:

Turn	Player <u>Addie</u>	Player <u>Eric</u>
1	3 cm	20 cm
2	10 cm	30 cm
3	20 cm	6 cm
4	10 cm	2 cm
5	40 cm	10 cm
6	2 cm	30 cm
7	6 cm	5 cm
Total Length	91 cm	103 cm
How Close?	9 cm under	3 cm over

Make a Metre

Line Master 7-2



Turn	Player _____	Player _____
1		
2		
3		
4		
5		
6		
7		
Total Length		
How Close?		



Turn	Player _____	Player _____
1		
2		
3		
4		
5		
6		
7		
Total Length		
How Close?		



What's the Measure? Problems

Line Master 8–1

Measuring Length and Height



Here are body measurements some children made. Who ordered her/his measurements from least to greatest?

Sofia's measures: 15 cm, 65 cm, 1 m, 90 cm

Matti's measures: 2 m, 165 cm, 58 cm, 1 m

Raja's measures: 10 cm, 95 cm, 130 cm, 2 m

Eden's measures: 87 cm, 78 cm, 100 cm, 1 m



Oliver measured his height and his arm span.
He is 1 m 38 cm tall. His arm span is 135 cm.
Which is longer?
Explain your thinking.



The playground needs a new fence.
Circle the unit of measure they should use.

kilometres metres centimetres millimetres

Explain your thinking.



Circle the best estimate for the height of the ceiling.

150 cm 2 m 2 m 50 cm 3 m

Explain your thinking.



What's the Measure? Problems

Line Master 8–2

Measuring Capacity and Mass



Alexis recorded some personal measures for her ***Measurements About ME!*** book. Which unit should she use for each measure?

height

foot length

weight

hair length

lung capacity

skin on palm



When you were born, your length and weight were measured.

What unit was used to measure your length?

What unit was used to measure your weight?

Explain your thinking.



Which measure would you see on a milk carton?

1 L 1 kg 1 m



Which measure would you see on a bag of flour?

2 L 2 kg 2 m



Which measure would you see on a cereal box?

650 g 650 L 650 cm 650 kg

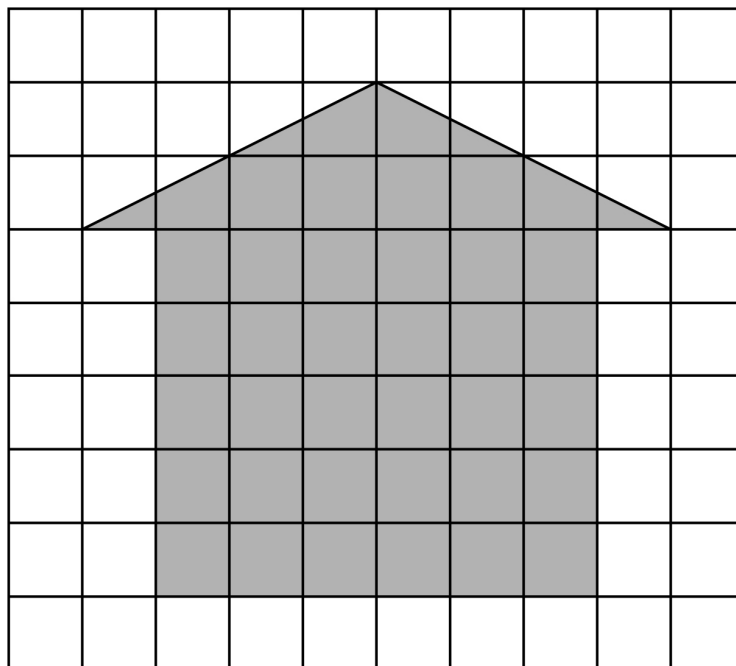


What's the Measure? Problems

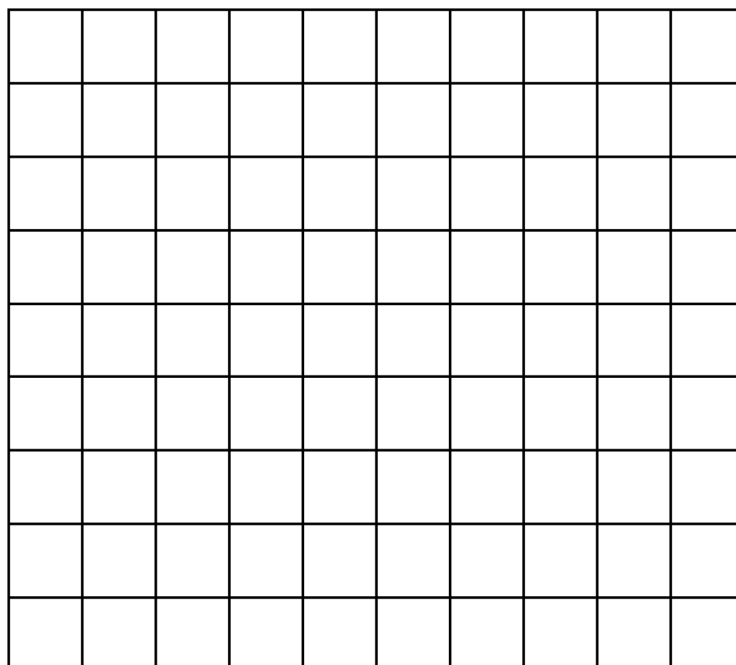
Line Master 8-3

Measuring Area 1

What is the area of this shape?  = 1 square unit



Draw a shape with the same area as the shape above.



What's the Measure? Problems

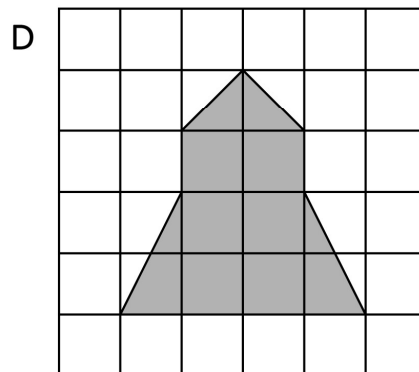
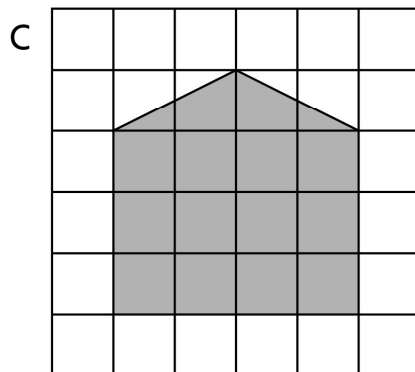
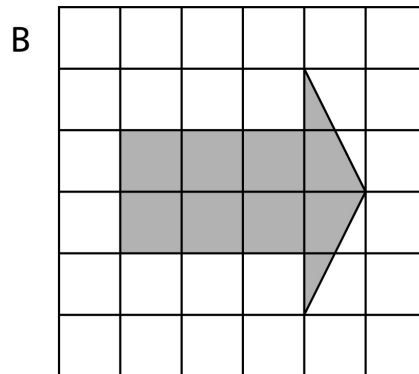
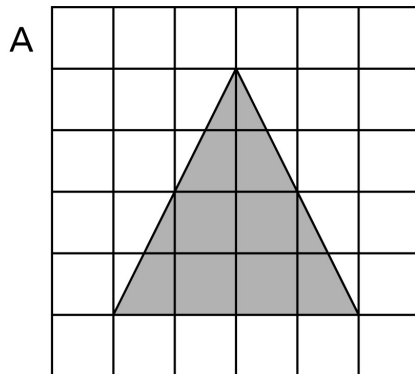
Line Master 8–4

Measuring Area 2

Which shape has an area of 9 square units?

Which shape has the greatest area?

Which shape has the least area?



Draw a shape with an area of 16 square units.

