

Scale Sense

Estimate and round pounds and kilograms.

GRADE 3 • 3.MG.1.b.ii

3.MG.1.b.ii "Estimate and measure: weight/mass of an object to the nearest U.S. Customary unit (pound) and metric unit (kilogram); and"

NAME _____

DATE _____

ROUND WHAT YOU MEASURE

First, make a reasonable estimate. Then use the scale measurement to round to the nearest whole pound or kilogram. Round up when there are 8 or more ounces left over, or 500 or more grams left over.

WORKED EXAMPLE

A suitcase has a mass of 11 kg 400 g.
What is its mass to the nearest kilogram?

1. Start with 11 whole kilograms.
2. Half of a kilogram is 500 g.
3. 400 g is less than 500 g, so round down.

Answer: 11 kg

PRACTICE 6 problems

- 1** A scale shows 6 lb 5 oz. What is the weight to the nearest pound?

ANSWER _____

- 2** A scale shows 10 lb 12 oz. What is the weight to the nearest pound?

ANSWER _____

- 3** A scale shows 1 kg 750 g. What is the mass to the nearest kilogram?

ANSWER _____

- 4** A scale shows 7 kg 120 g. What is the mass to the nearest kilogram?

ANSWER _____

- 5** A soccer ball weighs close to 1 pound or 15 pounds. Choose the better estimate.

ANSWER _____

- 6** A small house cat has a mass close to 4 kilograms or 40 kilograms. Choose the better estimate.

ANSWER _____

APPLY IT Show your work

- 1** At the school garden, Jae puts a pumpkin on a scale. It reads 13 lb 9 oz. Jae estimated 14 lb. What is the pumpkin's weight to the nearest pound? Does Jae's estimate match?

WORK SPACE

ANSWER _____

- 2** The robotics club measures a battery pack. Its mass is 4 kg 520 g. Ava estimated 4 kg. What is the mass to the nearest kilogram? Is Ava's estimate too low, too high, or exact?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Three mystery boxes are weighed. Box A is 5 lb 7 oz. Box B is 5 lb 8 oz. Box C is 6 lb 1 oz. Round each weight to the nearest pound. Which boxes have the same rounded weight? Explain why.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A scale shows 6 lb 5 oz. What is the weight to the nearest pound?	6 lb
2	A scale shows 10 lb 12 oz. What is the weight to the nearest pound?	11 lb
3	A scale shows 1 kg 750 g. What is the mass to the nearest kilogram?	2 kg
4	A scale shows 7 kg 120 g. What is the mass to the nearest kilogram?	7 kg
5	A soccer ball weighs close to 1 pound or 15 pounds. Choose the better estimate.	1 pound
6	A small house cat has a mass close to 4 kilograms or 40 kilograms. Choose the better estimate.	4 kilograms

PART 2 • APPLY IT

- 1. 14 lb; yes, Jae's estimate matches.** Since 9 oz is more than half of a pound, 13 lb 9 oz rounds up to 14 lb. Jae estimated 14 lb, so the estimate matches.
- 2. 5 kg; Ava's estimate is too low.** Since 520 g is more than half of a kilogram, 4 kg 520 g rounds up to 5 kg. Ava estimated 4 kg, which is too low.

CHALLENGE

Box A: 5 lb. Box B: 6 lb. Box C: 6 lb. Boxes B and C have the same rounded weight because Box B rounds up and Box C rounds down.

Accept pound or lb, and kilogram or kg. For the challenge, accept an explanation that identifies 8 oz as the halfway point for rounding to a pound.