LESSON MAKER PRO

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 _____

3 Measure a real object. Your teacher will provide a safe object and a scale that reads kilograms and grams. Name the object and estimate its mass in whole kilograms BEFORE weighing. With adult help, zero the scale, place the object on it, and read the measurement. Record the actual kilograms and grams, then round to the nearest kilogram. Compare the rounded result with your estimate.

WORK SPACE

ANSWER _____

CHALLENGE One step up

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.

WORK SPACE AND ANSWER

ANSWER KEY # Scale Sense

GRADE 3 · 3.MG.1.b.ii

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.
3. **Object and measurements vary. Record the actual kg and g, a correctly rounded whole-kg result, and a comparison consistent with the estimate.** Fewer than 500 g beyond a whole kilogram rounds down; 500 g or more rounds up. For example only, 2 kg 300 g rounds to 2 kg; an estimate of 3 kg is higher than that rounded result.

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. For Apply 3, supply a scale that displays or allows reading kilograms and grams and a safe object of at least 1 kg within its capacity. An adult handles any lifting and supports reading units; the learner records the estimate before the actual weighing, participates in the scale reading, and rounds. Check actual data, not an invented example.