


Name _____ Date _____

Measuring Mass



1. Draw a picture of the lab. Include the two main variables and the materials you will use.
2. Before you collect data, how can you tell that your two-pan balance is ready?

Copyright © Kendall Hunt Publishing Company

Measuring Mass SAB • Grade 2 • Unit 8 • Lesson 4 **403**

Student Activity Book - Page 403

Student Activity Book


Measuring Mass (SAB pp. 403–410)

Questions 1–11

- 1.* See Figure 3 in Lesson 3 for a sample picture.
- 2.* We must zero the balance.
- 3.* See Figure 4 in Lesson 3 for a sample data table.
- 4.* See Figure 5 in Lesson 3 for a sample graph.
- 5–9.* Answers will vary.

Name _____ Date _____

collect



K	20 g	10 g	5 g	1 g	M
mass	1	1	2	3	43 g


$20 + 10 + 5 + 5 + 1 + 1 + 1 = 43 \text{ g}$

3. Record the mass of 4 small objects and one object that is about 100 grams. Check the results with your partner.

Measuring Mass

K Kind of Object	20 Grams	10 Grams	5 Grams	1 Gram	M Total Mass (In _____ unit)

Copyright © Kendall Hunt Publishing Company




4. Make a bar graph of the data on the graph paper on the next page. Label the vertical (↓) and horizontal (→) axes.

404 SAB • Grade 2 • Unit 8 • Lesson 4 Measuring Mass

Student Activity Book - Page 404

Name _____ Date _____

Explore




5.
 - A. Which of your objects has the least mass?

 - B. If you had four of these objects, would their combined mass be more than 100 grams?

Tell how you know.
6.
 - A. Which of your objects has the most mass?

 - B. John has three objects. Each has a mass of 40 grams. Which has more mass, John's three objects or your heaviest object? Show or tell how you know.



Copyright © Kendall Hunt Publishing Company

Measuring Mass SAB • Grade 2 • Unit 8 • Lesson 4 **407**

Student Activity Book - Page 407

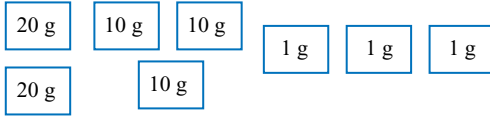
*Answers and/or discussion are included in the lesson.

10. Object A is between 48 and 49 grams.
 11. A. $20 + 10 + 10 + 10 + 5 + 5 + 5 + 5 + 1 + 1 = 73$ grams

B. Solutions may vary. Possible solutions:

20 g	10 g	5 g	1 g
2	3	0	3

$20 + 10 + 10 + 10 + 5 + 5 + 5 + 5 + 1 + 1 + 1 = 73$ grams



C. Possible solutions:

20 g	10 g	5 g	1 g
1	4	1	8

$20 + 10 + 10 + 10 + 10 + 5 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 73$ grams

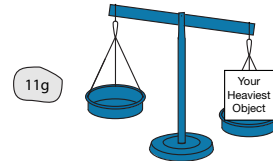
Name _____ Date _____

7. A. Add the mass of your lightest object to the mass of your heaviest object. What is the mass of the objects together? Write a number sentence.

- B. Put these two objects in one balance pan. Find their total mass using the balance. Did you get the same answer as in Question 7A? Why or why not?

8. How many more grams is your heaviest object than your lightest object?

9. Frank's objects are each 11 grams. About how many of Frank's objects must go into the pan to equal your heaviest object?



Student Activity Book - Page 408

Name _____ Date _____

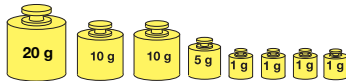
10. Mark uses these masses:



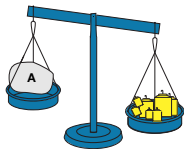
The balance looks like this.



Then Mark uses these masses.



Now the balance looks like this.



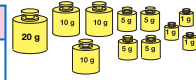
Estimate the mass of Object A. _____ grams

Student Activity Book - Page 409

Name _____ Date _____

11. Irma used these gram masses to measure the mass of her rock.

20 g	10 g	5 g	1 g
1	3	4	3



- A. Write a number sentence to show the mass of Irma's rock.

Number sentence _____

- B. Frank measured the mass of the same rock and said, "I used different masses." What masses could Frank have used to get the same total mass? Draw a picture and fill in the table.

20 g	10 g	5 g	1 g

Number sentence _____

- C. Is there another way Frank could have gotten the same total? Show it.

20 g	10 g	5 g	1 g

Number sentence _____

Student Activity Book - Page 410

Pet Rock (SAB pp. 413–414)

Questions 1–4

* Answers for Questions 1–4 will vary.

Name _____ Date _____

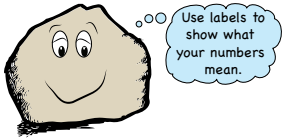
Pet Rock

Use counters, a 200 Chart, and number lines to solve the problems about your pet rock.

My Pet Rock's name is _____.

My Rock is _____ grams.

1. A. Draw the gram masses you need to mass your rock. Write a number sentence.



Number sentence _____

B. Show or tell another way to get the same total.

Number sentence _____

2. What if your rock had a mass twin? What would their total mass be? _____

Number sentence _____

Copyright © Kendall Hunt Publishing Company

Measuring Mass
SAB • Grade 2 • Unit 8 • Lesson 4
413

Student Activity Book - Page 413

Name _____ Date _____

3. What if your rock belonged to a set of mass triplets? What would their total mass be? _____

Number sentence _____

4. What if your rock was broken into four equal parts? What would the mass of each part be? _____

Number sentence _____

Copyright © Kendall Hunt Publishing Company

414
SAB • Grade 2 • Unit 8 • Lesson 4
Measuring Mass

Student Activity Book - Page 414

*Answers and/or discussion are included in the lesson.