

Lesson 9.1 Self-Paced

You will complete Lesson 9.1 as an Independent Study Lesson using these directions, color images and your Science Notebook. Please notice when you need to provide complete sentences and check in with Ms. Ruzicka

Big Questions to Think About:

- What cells of your body need energy?
- What are the reactants of the chemical reaction to release this energy?
- How do the reactants get to your cells?
- What are the products of the chemical reaction that releases energy?
- What happens to the products?

SN page 120—all questions should be answered, bullet points are fine.

REACTANTS

Image Starch Breaks Down

1. When you eat where does this reaction happening?
2. What happens to the subunits?
3. Do the subunits provide energy right away?
4. What would this reaction look like for proteins?

Image Capillaries and Small Intestine

5. What are capillaries?
6. What body system are they part of?
7. How does this image explain how the carbohydrate subunits leave the small intestine?

Image The Circulatory System

8. How can you use this model of the circulatory system to explain how subunits get to your 40 trillion cells?
9. What chemical reaction are your cells using the subunits for?

Back in Lesson 1 you found you breathe out less oxygen than you breathe in, this would be evidence that oxygen is USED in the body.

Image the Respiratory System

10. How does this image show how oxygen gets into the body?

Image Gas Exchange in the Alveoli

11. How can you use this diagram to explain how oxygen leaves the lungs and gets to every cell in your body?
12. What chemical reaction are your cells using the oxygen for?

PRODUCTS

13. Back in Lesson 1 you found that you exhaled more carbon dioxide than you inhaled. Use Images ***Circulatory System***, ***Respiratory System*** and ***Gas Exchange in the Alveoli*** to explain how carbon dioxide produced in every cell in your body (for example big toe) leaves the body. Be prepared to trace the path.

Check in with Ms. Ruzicka for a stamp of your progress 😊

SN Page 121 Analyzing Data

Part 1—Oxygen and Carbon Dioxide page 121

Make predictions for questions 1 and 2 EXPLAIN your reasoning with complete sentences.

Send one person with their SN to Ms. Ruzicka to get the data for the table on top of SN page 122.

Complete questions 1, 2, and 3 with complete sentences.

Part 2—Glucose page 122

Make prediction for question 1 on the bottom of page 122.

Image Glucose Levels in Blood (also in SN top of page 123)

Do your best to make sense of the data to complete questions 1 & 2 on pages 123.