

Life Science Grade 5 Evaluation

Teacher Section

Overview: Kids will demonstrate how well they understand important key concepts from this section.

Suggested Time: 45-60 minutes

Objectives: Students will be tested on the key concepts of Human Anatomy:

- How levers confer mechanical advantage and how the application of this principle applies to the musculoskeletal system.
- The sequential steps of digestion, and the roles of teeth and mouth, esophagus, stomach, small intestine, large intestine, and colon in the function of the digestive system.
- How levers confer mechanical advantage and how the application of this principle applies to the musculoskeletal system.
- How kidneys remove cellular wastes from blood and convert it into urine, which is stored in the bladder.
- How blood circulates through the heart chambers, lungs, and body, and how carbon dioxide (CO₂) and oxygen (O₂) are exchanged in the lungs and tissues.
- How contractions of the heart generate blood pressure, and heart valves prevent backflow of blood in the circulatory system.

Students will also demonstrate these principles:

- Know how to demonstrate how the eye works, and demonstrate common eye problems.
- Demonstrate how the body can be modeled by simple machines and joint models.

Materials (one set for entire class)

- Biconvex lens
- Balloon
- Candle
- Matches (you will light the candle when the student asks you to)
- Paper
- Clay
- Pencil
- Ruler

Lab Preparation

1. Print out copies of the student worksheets, lab practical, and quiz.
2. Have a tub of the materials in front of you at your desk. Kids will come up when called and demonstrate their knowledge using these materials.

Lesson

The students are taking two tests today: the quiz and the lab practical. The quiz takes about 20 minutes, and you'll find the answer key to make it easy to grade.

Lab Practical

Students will demonstrate individually that they know how to model certain parts of the body using scientific principles. While other kids are waiting for their turn, they will get started on their homework assignment. You get to decide whether they do their assignment individually or as a group.

Life Science Grade 5 Evaluation

Student Worksheet

Overview: Today you're going to take two different tests: the quiz and the lab practical. You're going to take the written quiz first, and the lab practical at the end of this lab. The lab practical isn't a paper test – it's is where you get to show your teacher that you know how to do something.

Lab Test & Homework

1. Your teacher will call you up so you can share how much you understand about human anatomy and how it works. Since science is so much more than just reading a book or circling the right answer, this is an important part of the test to find out what you really understand.
2. While you are waiting for your turn to show your teacher how much of this stuff you already know, you get to choose which homework assignment you want to complete. The assignment is due tomorrow, and half the credit is for creativity and the other half is for content, so really let your imagination fly as you work through it. Choose one:
 - a. Write a short story or skit about human anatomy from the perspective of the muscle, bone, heart, lungs, or one of the five senses (taste, touch, sight, sound, or smell). You'll read this aloud to your class.
 - b. Make a poster that teaches the main concepts of human anatomy. When you're finished, you'll use it to teach to a class in the younger grades and demonstrate each of the principles that you've learned.
 - c. Write and perform a poem or song about the most fascinating part of human anatomy. This will be performed for your class.