

Testing an Organ System

Summary

Students will choose an organ or organ system and design an experiment to test it.

Time Frame

2 class periods of 60 minutes each

Group Size

Small Groups

Materials

These will vary depending on what you have. Ideally:

blood pressure cuff

stethoscopes

lung volume bags

breath control analyzer (measures how long you can blow steadily into a tube)

grip meters

oral thermometer and alcohol cleaning solution

meter stick

clock with second hand or stopwatches

- [Measurements of Body Systems sheet](#)

(attached)

- [student sheet](#)

(attached)

Background for Teachers

Time Needed:

30-50 minutes for student to choose activity and set up their experiment. 30 minutes to collect data,

30 minutes to report results

Instructional Procedures

Gather the materials available. Your health teacher may have things you never dreamed of in a closet. Barbara Gentry at JSD can also lend you items. Many grocery store pharmacies have blood pressure machines and occasionally a bone scan is performed there also.

Show your students the materials and describe their use. You might call a health professional to come and talk to the class about the measurements and what they mean. Make an overhead of the list printed below to guide the discussion.

Place students in groups of 3 or 4 and hand out the student sheets.

Read over the sheets with students and make sure they understand their assignment.

Have students pick their system or instrument they will use. Two groups may do the same measurement if you have enough equipment. Make sure they test a different variable.

Check student-designed experiments. Check for groups that attempt to test two variables, a common mistake. They should repeat the experiment enough times to trust their results.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)