



Experiment

The students check what happens to their saliva when they eat a sour jelly.

Prepare sour jellies (one piece for each student).



Before distributing the jellies among your students you should make sure that none of them suffers from food allergy.

Distribute the jellies among your students.

Once they have eaten the jellies, ask your students the following questions:

What did you observe?

What happens to your saliva?

In what circumstances is there more saliva in your mouth than normally?

How much saliva does a human produce daily?

Summarize the topic:

Saliva secretion increases in the following circumstances:

1. Under the influence of thinking about food;
2. Under the influence of the sight of food;
3. Under the influence of the smell of food;
4. When food is placed in our mouth.



Experiment

The students check how much saliva humans secrete.

Divide your students into five groups.

**Materials:**

- a precise kitchen scale.

A set for each group:

- one gauze swab or pad – 1 in. x 1 in. (2.5 cm x 2.5 cm);
- a small plastic cup;
- tweezers;
- a stopwatch (or a smartphone with a built-in stopwatch function).

Each group weighs a piece of gauze on the kitchen scale and writes down the results on the chalkboard. Next, each group selects one volunteer, whose task is to put the piece of gauze in his or her mouth and chew on it for two minutes. The students measure the time using stopwatches. Once the specified time has elapsed, the volunteers throw the pieces of gauze into the plastic cups.



While the volunteers are chewing on the pieces of gauze, talk with the rest of your students about the experiment you are carrying out. Ask your students the following questions:

What can be examined in this way? What do you think?

What will happen to the swabs?

Ask another volunteer to take the swabs out of the cups using the tweezers, and then to weigh them in turn on the kitchen scale. Another person should write down the results on the chalkboard, right next to the results obtained after weighing dry swabs.

Ask your students the following questions:

What happened to the swabs?

Are the weights of particular swabs (after being chewed on for two minutes) comparable from person to person? Why?



Experiment

The students look at the photos of selected animals and wonder what they can possibly use their saliva for.

The students work individually. Distribute the worksheets among the students. The task is to name the animals presented in the worksheets, caption them, and then connect the names of particular animals with appropriate drawings that symbolize the way a given animal uses its saliva.



First, the students will start completing the task using their own knowledge and intuition. Next, you should show them the photos, owing to which they will be able to complete the rest of the task.

Once the task is completed, ask the following questions:

In what ways do animals use their saliva?

Would they be able to live without it?

How much saliva do those animals produce within 24 hours?

What does the amount of saliva they produce depend on?



Experiment

The students examine how viper venom works.

**Materials:**

A set for each group:

- a transparent cup,
- 100 ml of milk,
- a teaspoonful of the solution prepared beforehand (recipe in the Get Ready section), the action of which is similar to that of viper venom.

The students are arranged to form several groups, a few persons each. A transparent cup containing about 100 ml of milk is placed on each group's table. The students pour a drop of the "viper venom" preparation into the milk and observe what happens to it.

Ask your students the following questions:

What happened?

What does the milk look like?

Why has it coagulated?