

Biological Balderdash

Summary

In this fun activity to introduce students to the vocabulary of protein synthesis the students will play "Balderdash." They will then demonstrate their knowledge by passing a short quiz.

Time Frame

1 class periods of 60 minutes each

Group Size

Small Groups

Materials

paper and pencils
overhead projector
transparency

Instructional Procedures

Divide students up into groups of 4

Tell each group to get out a sheet of paper and tear it into 8 pieces. The group should write their group name or number on each piece of paper.

Explain to the students that they will be playing "Balderdash" as a class. The rules are as follows:

You will give them an unfamiliar word. Say the word and then spell it.

Each group should write the word on a piece of torn paper (1 per group). They will then have 2 minutes to come up with a "definition" of the word and write it on the paper. And then give the paper to you

You will then read all definitions to the class.

Each group will cast a vote for the student definition that they think will best match the teachers' definition.

The teacher will write the correct definition on the overhead from notes or have the transparency already prepared.

Scoring is as follows: 2 points for voting for the correct definition, 1 point per vote by another group for your definition, 3 points for writing the correct definition. Have students keep their own score.

At the end of 6 rounds the winners will receive extra points.

Do an example with the students first. Use the word "moppet" or use a card from the real "Balderdash" if you own the game. "Moppet" is the word used by in England for a small child.

Remind the students that the words they will be using have to do with DNA, genetics, and the making of proteins.

Begin the game. The following are words that could be used, you may want to restate them to make them less obvious (not teacher language):

Codon: 3 nucleotides in a row

Replication- DNA makes copies of itself

Transcription: copies of DNA are made in the nucleus by mRNA

Mutation: a change in DNA

tRNA: transfer RNA which brings amino acids to the ribosome

mRNA: messenger RNA which is a copy of DNA that leaves the nucleus of a cell

Translation: the process of assembling a protein from the copy of DNA carried by mRNA

Amino Acid-molecules found in cells from which proteins are formed.

Ribosome-location of protein formation, contains rRNA

Protein-Molecules which control cell functions and structure

If you want you can throw in fun words every few rounds.

After you have completed all the words have each student get out a sheet of paper and write down all ten vocabulary words and their definitions. Allow students to work together on this.

Give students a quiz. They should choose 4 words and define them without using their notes.

Assessment Plan

Scoring Guide:

Vocabulary Page.....11 points

Quiz.....8 points

Participation.....6 points

Total.....25 points

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)