

Protein Synthesis Models

Summary

Students will understand that genetic information coded in DNA is passed from parents to offspring by sexual and asexual reproduction by making a working model of protein synthesis and display for the class.

Main Core Tie

Science - Biology

[Standard 4 Objective 3](#)

Time Frame

1 class periods of 60 minutes each

Group Size

Small Groups

Materials

- [overhead of sheet](#)
attached
- 9 grocery bags
- random supplies i.e.:
 - meter sticks
 - tape
 - string
 - hat
 - rubberband
 - hula hoop
 - insect nets
 - balloons etc.

Student Prior Knowledge

Students should understand the process of protein synthesis.

Instructional Procedures

Assemble a bag of random supplies for each table of 4 students. You may choose to make all the bags the same or you could make them all different. The more interesting and random your bags are the more interesting these models will turn out to be.

Put the overhead (attached) up and explain the project to students.

Pass out the bags to students.

Be strict on only allowing 15 minutes.

Have groups present one at a time.

Allow other students in the classroom to identify the key players in the model: mRNA, tRNA, amino acids, polypeptide chains etc.

You may want to give a short quiz at the conclusion of this activity.

Assessment Plan

Scoring Guide:

Creativity..... 15 points
Accuracy..... 15 points
Members Participate..... 15 points

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)