

Marble Act



Objectives:

1. To create a ramp to show positive and negative acceleration
2. To understand that gravity is a force that affects motion

Materials: One Marble and noodle ramp

Procedures: (You will have 10 minutes to complete #1 to #6)

1. Fix a ramp with the noodle so that one end of the ramp is higher than the other end. Cover the lower end of the ramp with your hand so the marble doesn't roll away from your area.
2. Release the marble from the higher end.
3. In your CB, describe in details the motion of the marble in one or two sentences.
4. Fix the ramp by slightly lifting both ends at the same elevation.
5. Release the marble from one end of the noodle.
6. In your CB, describe with details the motion of the marble in one or two sentences.....
7. STOP!!! Discuss your information with your teacher.
8. In your CB, make a drawing from the first ramp. Draw the marble at a position that has positive acceleration. Write a note explaining why this position creates positive acceleration (explain the forces involved).
9. In your CB, make a drawing for the second ramp. Draw the marble at a position that has negative acceleration. Write a note explaining why this position creates negative acceleration (explain the forces involved).