

Pictou County Forest School - Primary Pre-vist Lesson Plans

Physical Science: Movement

Activity: Movement Centres (inside) (40 minutes)

Overall Curriculum Outcome: *Learners will test movement of objects*

Specific Curriculum connections:

- *Properties of objects determine movement*
 - *How can I determine attributes that affect the movement of an object?*
 - *How can I predict how an object will move?*
- *Properties of ramps impact movement*
 - *How can I change the way an object moves down a ramp (faster, farther, etc.)?*
 - *How can I design a fair test to assess my ramp?*
 - *How can I determine whether different surfaces affect the way an object travels down a ramp?*

Materials:

- Various lengths of wood for ramps
- buckets/tubs for the water centre

Intro/Activation:

- Hold two objects in your hands (e.g., a crumpled piece of paper and a flat piece of paper) and ask the students to predict which object will fall to the ground first? Drop your objects and discuss the idea of attributes with the group and how this affects how things work in the world.
- Give students time and space to explore various classroom objects around them (e.g., blocks, balloons, play silks etc.) and invite them to bring their objects back to circle for a show and share. Adults facilitate a compare/contrast conversation about the found items (e.g., "I wonder why the crumpled up paper ball fell faster than the flat piece of paper?"). Divide into three groups and rotate students through the various centres.

Ramp (off steps of main shelter)	Drop	Water
Ramps of various lengths and materials will be provided to use off of tables, chairs etc. Staff can introduce variables to push students' thinking in the following ways: <ul style="list-style-type: none">- Changing the angles of the ramps- Controlling the rolled items such as various 3-D objects (pyramid vs prisms)- Push vs non-push	Students are provided an assortment of items to experiment with. Have conversations about the idea of attributes and have the group make predictions about how the various objects will perform when dropped. For example: <ul style="list-style-type: none">- Play silks vs paper- Cardboard vs paper- Paper airplanes	Students collect an assortment of items and bring them back to share with the group. Have conversations about the idea of attributes and have the group make predictions about how the various objects will perform when dropped into water. For example: <ul style="list-style-type: none">- Feathers vs rocks- Foam balls vs marbles- Various boats