

Light Waves: Fruit Loop Necklaces



Age Group: K-8

Child/Adult Ratio: 6 to 1

Take Away Artifact: Yes

Approximate Time: 45 mins

Divisions Covered: All

Questions to ask:

Why do we see color?

Precautions:

Prisms are glass and can break

Materials:

Per Student: 18" length of string, plastic needle, 1.5 cups of multicolored Fruit Loops,

For class: video <https://www.youtube.com/watch?v=GqbgJ3c3yhc>, Infographic below, prisms, rainbow color sheet below (younger students) colored pencils (ROYGBIV).

Skills Required for Completion of Task:

Motor skills

- Bilateral upper extremity coordination
- Ability to manipulate small objects
- Hand-eye coordination
- Ability to grip objects
- Ability to stabilize objects/tasks

Process/Cognitive skills

- Ability to attend to a task for greater than 5 minutes
- Follow multi-step directions
- Ability to sequence steps
- Ability to understand safety precaution
- Ability to organize or keep materials organized for a task
- Ability to adjust to different workspace requirements

Social skills

- Ability to communicate and share equipment with peers/staff appropriately

K-8 Standards:

4.PS4: Waves and their Application in Technologies for Information Transfer 2) Describe how the colors of available light sources and the bending of light waves determine what we see.

Simple Science:

Light travels in waves, and different wavelengths appear as different colors. For example, red light has a longer wavelength than violet light.

This activity would be appropriate completed by the following disciplines:

Occupational therapy, LCSW, Family Services

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Instructions:

Introduce the concept of bending light with the video linked above and the infographic images below. Using the prisms, demonstrate how the light can be bent to create rainbows of light on surfaces. Assist students with tying the needle to one end of the string and using a fruitloop as an anchor on the other end. Instruct students to sort Fruit Loops by color and string them (10-15 each) on the necklace: Red, Orange, Yellow, Green, Blue, and Purple. Any remaining time can be used to snack on Fruit Loops and color the rainbow color sheet.

