

YMCA SAFE LESSON PLAN

Title of Lesson Plan: Orange Sink or Float

All Ages: All Ages

Theme: Weird Science

Time Allotted, Resources & Materials Needed (websites used)

30mins

- An orange
- A deep bowl or container
- Water
- What is happening discussion form

***Recommended books for this activity:** No

Set-Up/Environment (Location? Space needed?) :

Classroom/Portables

HIGHLIGHT MINIMUM OF 2 YMCA FRAMEWORK REQUIREMENTS:

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| 1. Physical Activity (Daily) | 4. Nutrition Education (2x/month) | 7. Math & Literacy Integration (30 min. daily) |
| 2. Arts Education (1x/week) | 5. 21st Century Skill & STEM (2x/week) | 8. Global Learning (1x/week) |
| 3. Leadership, Assets, Character Development (1x/week) | 6. College & Career Readiness (2x/month) | |

Learning Objective (Skills Learned & Knowledge I want youth to learn)- Focused :

Students will learn the about different reasons why items sink or floats. Students will get to ask questions and share any experiments they have done before.

Introduction to the Lesson - Sequence:

Students will be shown the materials that we will be using for the experiment. Students will be partner up and write down their prediction about their experiment.

Learning Activities (What will I do to meet the above learning objectives)(how to)- Sequence/Active:

Students will start their experiment to see if their prediction was correct. Students then will peel their orange and see if there are any changes in their experiment. Staff will discuss what is happening.

Check in questions "do they get it?" (Open ended questions) - Active:

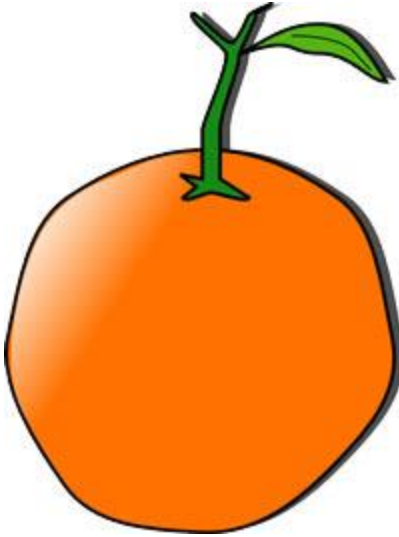
"How did you come up with their prediction"? "Where there partner's prediction the same"?

Debrief and Reflection (Review Learning Objective) (Open ended questions) – Explicit Learning:

At the end of this activity ask students; "what would they change about their orange"? "Do you feel there would be a different outcome"?

How Can I Expand & Extend!?(Event, Speaker, Field Trip, Math, Literacy, etc):

We can have students work with partners and change something with their orange to see if there would be a different outcome.



Instructions:

- 1. Fill the bowl with water.**
- 2. Put the orange in the water and watch what happens.**
- 3. Peel the rind from the orange and try the experiment again, what happens this time?**

What's happening?

The first time you put the orange in the bowl of water it probably floated on the surface, after you removed the rind however, it probably sunk to the bottom, why?