|  |
| --- |
| **LESSON PLAN** |
| Grade: 6-8 Title of the Lesson: Storage Space in a PandemicCurriculum Area: Financial Literacy, Mathematics Unit of Study: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Background Information:** Students will have had some experiences in using various storage spaces both at school (locker, desk) and at home (own room, putting away groceries, storage for toys).Experts recommend that adults aim for 8-10 servings of fruit and vegetables a day, like leafy greens, tomatoes, cabbage, cauliflower, eggplant, zucchini, radishes and watermelon, which contributes to a daily water intake. However, during pandemics the fresh food may be hard to get/keep, which makes it even more important to drink enough pure water. One person needs 2L of water each day. | **Guiding Questions:** What percentage of available space is needed to store water in water bottles for a month for one person? |
| **Learning Expectations:*** Planning for storage space needed when storing food/water for longer periods of time.
* Consideration of living quarters vs. storage space
 | **Curriculum Expectations**MATHEMATICS: MEASUREMENT: solve problems requiring conversion from larger to smaller metric units (e.g., metres to centimetres, kilograms to grams, litres to millilitres) -determine, through investigation using a variety of tools and strategies (e.g., decomposing rectangular prisms into triangular prisms; stacking congruent triangular layers of concrete materials to form a triangular prism), the relationship between the height, the area of the base, and the volume of a triangular prism, and generalize to develop the formula (i.e., Volume = area of base x height) (Sample problem: Create triangular prisms by splitting rectangular prisms in half. For each prism, record the area of the base, the height, and the volume on a chart. Identify relationships.); -determine, using concrete materials, the relationship between units used to measure area (i.e., square centimetre, square metre), and apply the relationship to solve problems that involve conversions from square metres to square centimetres |
| **Lesson: Storage Space in a Pandemic****Minds On:** Hook Question: How long can a person survive without water? (3 days, but it depends on conditions) What are the signs that our body needs water?**Action:**Answer the following questions: 1. How much water does one person need per day to maintain their health? Per week? Per month?
2. If a case of spring water holds 24 x 500ml bottles, what percentage of the case contains the water required for a single person’s daily use? For a week?
3. If one case of spring water bottles has dimensions of 1m x 80cm x 40cm, what volume in cm3 is used for storing a single person’s daily amount of water? For a week? A month?
4. How many cases of spring water bottles can be stored in the 1.5m x 1.5m x 2.6m pantry?

**Consolidation:*** Write a paragraph to explain what you learned. Consider how planning the water consumption would be different for people who live in a city versus those who live in more isolated communities or in nature?
* Which one would you choose, if you had a choice? Why?
 | **Materials/ Resources:**-calculator |
|
| **Extension of Learning:**1. How many water cases can you store if you lived in a 500 ft2 apartment? What fraction of the space in the apartment would you dedicate to storing water cases?
2. How long will that water last you? How long will that water last you and your roommate?
 |
| **Personal Notes/Reminders/Homework/Other Considerations:** |