

PROJECT TITLE : BUILDING WITH STRAWS

Unit	Unit 12 Unique Buildings
Content standard	1.2 Will be able to listen and respond appropriately in formal and informal situations for a variety of purposes. 4.3 Will be able to plan, organize and produce creative works for enjoyment.
Learning standard	1.2.2 Able to listen, follow, and give instructions. 1.2.4 Able to participate in conversations with peers. 4.3.1 Able to plan, produce and display creative works based on literary texts using a variety of media with guidance.
STEAM Integration	Science - Learn about stability. Technology - Creative and innovative in building a tall and stable tower. Engineering - To build the tallest tower using limited materials. Art - Design the tower creatively. Mathematics - Determine which tower promotes safety and stability.
Equipment and materials	▪ Drinking straws (10 to 20 straws) ▪ Masking tape ▪ Scissor ▪ Measuring tape/Ruler
Resources	▪ A sample video of the straw tower from the web. ▪ Website or articles related to the straw tower.
Summary of activity	1. Students will watch videos and read detailed instructions on how to build a tower using only straws and tapes. For example:- - https://www.youtube.com/watch?v=Z7n2ZR3CSdQ - https://lemonlimeadventures.com/building-with-straws-engineering-challenge-for-kids/ 2. Students will be separated into a few groups. 3. Each group will construct a tall yet stable tower using straws and tapes as provided by the teacher. 4. Once done, the teacher will measure the tower and determines which tower is the tallest and most stable.
Knowledge, Skills and Values	▪ Use problem-solving skills. ▪ Improve the student's creativity and innovative skills. ▪ Learn the importance of teamwork. ▪ Listen, respond and follow instructions appropriately.
Experience acquired by students	▪ Design and build a tower using limited materials. ▪ Improve their creativity skills. ▪ The importance of constructing a stable structure.

PROJECT TITLE : MAKE A TISSUE PAPER PARACHUTE

Unit	Unit 9 Space Exploration
Content standard	1.2 Will be able to listen and respond appropriately in formal and informal situations for a variety of purposes. 4.3 Will be able to plan, organize and produce creative works for enjoyment.
Learning standard	1.2.2 Able to listen, follow, and give instructions. 1.2.4 Able to participate in conversations with peers. 4.3.1 Able to plan, produce and display creative works based on literary texts using a variety of media with guidance.
STEAM Integration	Science - Measure the speed of each parachute. Technology - Build a parachute. Engineering - Create a parachute and determine how long each fall will take. Art - Design a tissue paper parachute. Mathematics - Measure how long each fall takes.
Equipment and materials	▪ Scissor ▪ Ruler ▪ Tape ▪ A small toy figure (Light weight) ▪ Hole puncher ▪ Tissue paper (Light material) ▪ Twine ▪ Stopwatch
Resources	▪ A sample video on how to make a tissue paper parachute from the web. ▪ Website or articles related to tissue paper parachute.
Summary of activity	1. Students will watch videos and read detailed instructions on how to build a tower using only straws and tapes. For example:- - https://www.youtube.com/watch?v=6RA9x4wlnW8 - https://www.sciencebuddies.org/stem-activities/parachutes#materials . 2. Students will be separated into a few groups. 3. Each group will be given materials needed to make a tissue paper parachute. 4. Students may refer to the instructions to create a tissue paper parachute. 5. Once completed, they need to test out their parachute from a high place and the teacher will record how long it takes for each parachute to fall to the ground. Be sure to release the parachute from the same height.
Knowledge, skills and values	▪ Improve creativity and innovative skills. ▪ Experiment with speed and weight. ▪ Listen, respond and follow instructions appropriately.
Experience acquired by students	▪ Improve their creativity skills ▪ Learn how parachute works. ▪ How to balance weight with speed.