Name of Strategy:	**Tic-Tac-Toe Choice Board (sometimes called Think-Tac-Toe)**
Organising Element:	General Capabilities: Critical and Creative Thinking, Numeracy

Purpose of Strategy:

This strategy gives students the opportunity to participate in multiple tasks that allow them to practise mathematical skills and demonstrate their understanding of mathematical concepts. Tic-Tac-Toe addresses student readiness, interests and preferences and often uses Gardner's Multiple Intelligences model. It is therefore an excellent strategy for differentiation.

Description of Strategy

Nine different tasks are designed for the TTT choice board based on readiness, as determined by formative assessment. Students must choose three tasks, one of which must be completed by everyone. Students may choose the remaining two tasks based on their interests and learning preferences.
There is no requirement for the three tasks to make a TTT.

Tic-Tac-Toe Template

TIC-TAC-TOE STUDENT CHOICE ACTIVITIES

1.	2.	3.
4.	5.	6.
7.	8.	9.

I/we chose activities # _____, #_____, and #_____.

Name _____

Coil, C. 2004, "Pieces of Learning", USA, www.piecesoflearning.com , p.77

Teaching Example	Year level: All

Name: _____

Probability TIC-TAC-TOE

Directions: Three in a row, tic-tac-toe! Complete three activities to win the game. You may go vertically, horizontally, or diagonally! Share your activity with your partner and once they give you the okay, color the box for the activity you completed.

Find out if the probability of flipping a coin is always 50:50. Complete an experiment flipping the coin 100 times, record your results and present your findings to the class.	**Explain the difference between Experimental Probability and Theoretical Probability.**	**Complete a tree diagram for the situation listed below. Be sure to include the sample space.** **A bag contains 3 Red marbles, 2 Yellow, and 1 Blue. You select one marble, replace it, and choose a second marble.**
Determine if the probability of flipping a cup is the same as flipping a coin.	**Watch the YouTube video on probability below** https://www.youtube.com/watch?v=eFM2twmsu_c	**Determine the probability of selecting each color of M & M from a "Fun Size" bag.**
If you roll a standard number cube, what is the probability your result will be an even number?	**Determine the probability of selecting each color of Skittles from a "Fun Size" bag.**	**If you select one student from the class at random, what is the probability that it is a girl?**

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Multiplication Tic Tac Toe

Pick three in a row vertically, horizontally, or diagonally to complete for homework. These activities will help you practice and work towards memorizing your multiplication facts. For some of the activities, you will have nothing to turn in. If you pick one of these, be sure to get a parent signature inside the box to show that you completed it.

Flashcard Practice Spend at least 10 minutes practicing your multiplication flashcards with someone at home. Parent Signature:	**Multiples** Write the first 10 multiples for the numbers 6 or 7.	**Area** See your teacher for an Area of a Rectangle Page. Use multiplication the find the area of the rectangles.
Name Multiplication Pick 5 people. Record their names on the Name Multiplication sheet. Count the number of letters in their first name, then count the number of letters in their last name. Multiply these numbers together to find the product.	**Fact Family** Pick two fact families. Write the 2 multiplication and 2 division facts for each family to turn in.	**Multiples** Write the first 10 multiples for the numbers 3 or 4.
Multiples Write the first 10 multiples for the numbers 8 or 9.	**Fact Sheet** See your teacher for a multiplication fact sheet that you can complete for homework.	**Dice Multiplication** Roll two dice. Multiply the two numbers together to find the product. Remember to record your multiplication fact on a piece of paper to turn into your teacher. Repeat this 10 times. *You should have 10 facts written down to turn in.

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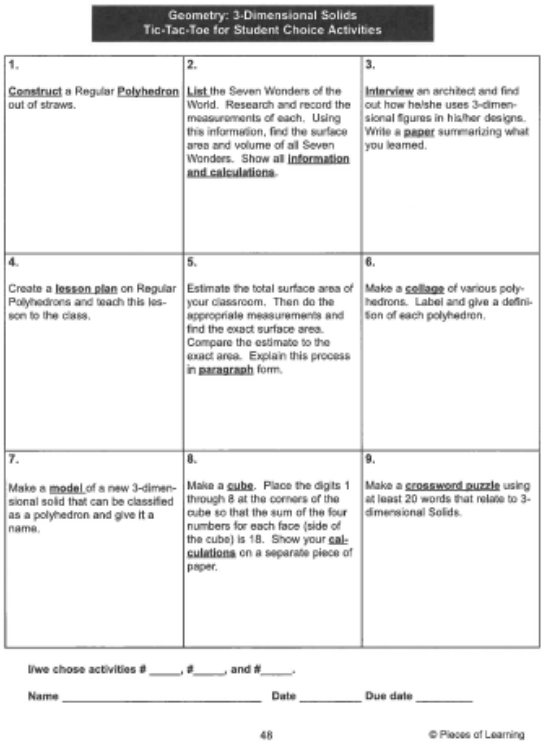

Geometry: 3-Dimensional Solids
Tic-Tac-Toe for Student Choice Activities

1. **Construct** a Regular **Polyhedron** out of straws.	2. **List** the Seven Wonders of the World. Research and record the measurements of each. Using this information, find the surface area and volume of all Seven Wonders. Show all **information and calculations**.	3. **Interview** an architect and find out how he/she uses 3-dimensional figures in his/her designs. Write a **paper** summarizing what you learned.
4. Create a **lesson plan** on Regular Polyhedrons and teach this lesson to the class.	5. Estimate the total surface area of your classroom. Then do the appropriate measurements and find the exact surface area. Compare the estimate to the exact area. Explain this process in **paragraph** form.	6. Make a **collage** of various polyhedrons. Label and give a definition of each polyhedron.
7. Make a **model** of a new 3-dimensional solid that can be classified as a polyhedron and give it a name.	8. Make a **cube**. Place the digits 1 through 8 at the corners of the cube so that the sum of the four numbers for each face (side of the cube) is 18. Show your **calculations** on a separate piece of paper.	9. Make a **crossword puzzle** using at least 20 words that relate to 3-dimensional Solids.

I/we chose activities # _____, #_____, and #_____.

Name _____ Date _____ Due date _____

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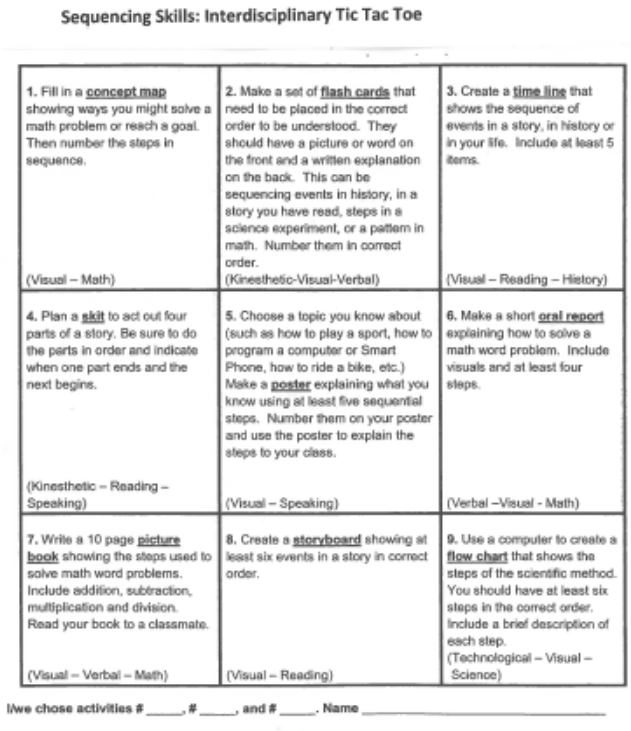

Sequencing Skills: Interdisciplinary Tic Tac Toe

1. Fill in a **concept map** showing ways you might solve a math problem or reach a goal. Then number the steps in sequence. (Visual – Math)	2. Make a set of **flash cards** that need to be placed in the correct order to be understood. They should have a picture or word on the front and a written explanation on the back. This can be sequencing events in history, in a story you have read, steps in a science experiment, or a pattern in math. Number them in correct order. (Kinesthetic-Visual-Verbal)	3. Create a **time line** that shows the sequence of events in a story, in history or in your life. Include at least 5 items. (Visual – Reading – History)
4. Plan a **skit** to act out four parts of a story. Be sure to do the parts in order and indicate when one part ends and the next begins. (Kinesthetic – Reading – Speaking)	5. Choose a topic you know about (such as how to play a sport, how to program a computer or Smart Phone, how to ride a bike, etc.) Make a **poster** explaining what you know using at least five sequential steps. Number them on your poster and use the poster to explain the steps to your class. (Visual – Speaking)	6. Make a short **oral report** explaining how to solve a math word problem. Include visuals and at least four steps. (Verbal –Visual - Math)
7. Write a 10 page **picture book** showing the steps used to solve math word problems. Include addition, subtraction, multiplication and division. Read your book to a classmate. (Visual – Verbal – Math)	8. Create a **storyboard** showing at least six events in a story in correct order. (Visual – Reading)	9. Use a computer to create a **flow chart** that shows the steps of the scientific method. You should have at least six steps in the correct order. Include a brief description of each step. (Technological – Visual – Science)

I/we chose activities # _____, # _____, and # _____. Name _____

Coil, C. 2004, "Pieces of Learning", USA, www.piecesoflearning.com

References:

Coil, C. 2004, "Pieces of Learning", USA, www.piecesoflearning.com
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