Objective: Student will be able to:
- Create a hypothesis using “If/Then” statements.
- Work through the scientific method.
- Communicate results with peers.

Instruction:
1. After watching “A Sage's Journey” Pick one shape you would like to work on for this activity. Draw your shape on the space provided below.

2. Create an “if/then” statement as an initial step to solving the Tangram Puzzle. Use the example provided in class to determine how to complete this.

   If ______________, then ______________.

3. Begin attempting to solve the Tangram shape using your hypothesis. (Please note, this may take many attempts as your hypothesis covers only the initial step.)

   Did your first attempt at a hypothesis work? (Place an “X” next to your response)

   _____ Yes, Go to Question #6
   _____ No, Go to Question # 4

4. Formulate a new hypothesis using an “if/then” statement.

   If ______________, then ______________.

   Attempt to solve the Tangram shape using your new hypothesis. (Please note, this may take many attempts as your hypothesis covers only the initial step.)

   Did your first attempt at a hypothesis work? (Place an “X” next to your response)

   _____ Yes, Go to Question #6
   _____ No, Go to Question # 5
5. Formulate a new hypothesis using an “if/then” statement.

If ____________________________________________________________, then
______________________________________________________________.

Attempt to solve the Tangram shape using your new hypothesis. (Please note, this may take
many attempts as your hypothesis covers only the initial step.)
Did your first attempt at a hypothesis work? (Place an “X” next to your response)
   _____ Yes, Go to Question #6
   _____ No, Go to Question # 7

6. Draw the solution to your Tangram Puzzle. Highlight the shapes used in your “if/then”
statement in the space below. When finished write a step by step explanation as to how you
solved the Tangram puzzle. This explanation should be clear enough that a classmate could
replicate your findings.

7. Draw what you believe to be the closest you came to solving your Tangram Puzzle in the
space below. Highlight the shapes used in your “if, then” statement. Explain why you feel as
though you were not able to solve your Tangram puzzle. Provide ideas you have that may help
others solve the puzzle.
Questions:

1. This activity had you actively using the scientific method. Provide an example of when each step was used.

2. How has your understanding of the scientific method changed or become more clear after completing this activity?

3. Putting Science aside for one moment, why do you believe Tangrams are so popular in Eastern Asia?