Claim-Support-Question

**Claim**- Make a claim about the topic. (Something you think it true)

**Support**- Identify support for your claim. How can you prove a claim is true or not true?

**Question**- Ask a questions about the game, a claim, or the phenomena.

Example

Claim- All multiples of 9 are also multiples of 3.

Support- Students used linker cubes to show how three groups of three makes 9 so every multiple of 9 is the third multiple of 3.

Question- Does it always work? Are all multiples of 6 in multiples of 3? What if…

Tips for Success

* Start with a game
* Teacher records claims while students play
* All try to prove or disprove the same claim at first. Be selective about what claim they all work on.
* Move into a problem with multiple answers.
* Have students share a correct answer. The purpose is to show students we are NOT looking for a correct answer we are looking to make claims about what is true about all possible answers.
* Pulling the first claim, the first time is not easy.
* Prove or disprove one claim at a time.
* Turn and talk before each support.
* Use sentence frames as needed.

**Claim Support Question Games**

**Poison**

* Two players alternate turns
* There are 10 objects
* Each turn a player must take either 1 or 2 objects
* The player to take the last object loses and is “poisoned”

**Last Turn Wins**

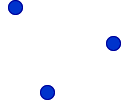
Using pattern block paper, create individual game boards cut in a variety of different shapes and sizes. Pairs of students take turns putting pattern block pieces of their choice on the game board. Take turns until the game board is filled up. The last person to place a piece wins.

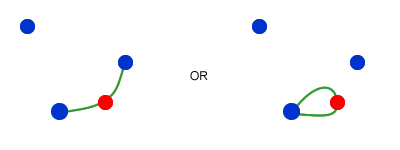
**Pig**

Player one rolls two dice. Continue rolling as many times as you wish keeping track of your total score for that turn. Your turn ends when you either choose to stay or if you roll a 1. If you choose to stay, your score is recorded on a sheet of paper. If you roll a 1 on either dice, the total points for that turn (the points in your head not the point on the paper from previous turns) are erased and you get a zero for that turn. If you roll double ones, the points on the paper get erased. Reach 100 points first to win.

**Sprouts**

Sprouts is a game for two players. All you really need is paper and a pencil.. The game starts by drawing any number of spots. In this example we are going to look at 3 spots.

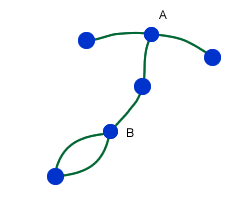


The first player has a turn by joining two of the spots and marking a new spot in the middle of the line. Or the line may start and end on the same spot. 

**Rules:**

You are not allowed to draw a line which crosses another line. This is important to remember!

A spot cannot have more than three lines leading to or from it. For example, in the game below, spots A and B cannot be used any more because they already have three lines.



The idea is to make it impossible for the other player to draw a line.

So the last person to draw a line is the winner.

Claim-Support-Question

3rd Grade Trimester 1 Benchmark Assessment

Claim #1 70,000+400+80+3 is the same as 70,480.

Support

Claim#2 8,759 is the largest number you can make using only one 8, one 7, one 5, and one 9.

Support

Claim #3 Doubling any odd number is odd.

Support

Claim #4 All multiples of 4 are found in the multiples of 2.

Support

Claim #5 When solving *28+54=* it is ok to take 2 away from 54 and add it to 28 to make the new problem of *30+52=.*

Support

Example Problems From *Good Questions for Math Teaching* for Claim, Support, Question

2nd

I’m thinking of a number between 1-100 that has a 9 in it. What might my number be?

3rd

I wrote down a number with one zero in it, but I cannot remember what it was. I know it was between 500 and 800. What might it have been?

4th

Two numbers multiply to make 360. One has a zero on the end. What might the two numbers be?

5th

Which of the following problems has the largest product?  Try to figure it out by not solving any of the problems.

3.2 X 17    24 X 2.9   50 X 3.5

2.4 X 29  1.7 X 50 5.0 X 36

6th

a + a = cb

7-8th

The students in Mr. Bruski’s math class were playing Guess My Rule. Mr. Bruski planned to show the students pairs of starting and final values and ask the students to use the information to determine the rule. Mr. Bruski wrote the first pair in the extended T-chart as shown below.

|  |  |  |
| --- | --- | --- |
| Starting Value | Using the Rule | Final Value |
| 4 |  | 12 |

References

Ritchhart, R., Church, & M., Morrison, K. (2011). *Making Thinking Visible: How to Promote Engagement, Understanding, and Independence for ALL Learners.* San Francisco: Jossey-Bass.

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