



Tug Boat

Kindergarten Greater Than, Less Than, Equal To 3 levels

Probing Questions

- How do you move the boats?
- What are you supposed to do in this game?
- How are you checking to see if it will be correct?

What's Important Here?

This game helps students develop a schema for equality. While there is no formal equal sign, the animation clearly models equality and inequality. This helps students understand that = doesn't mean "find the answer" but "same as." This is an excellent opportunity to model this language.

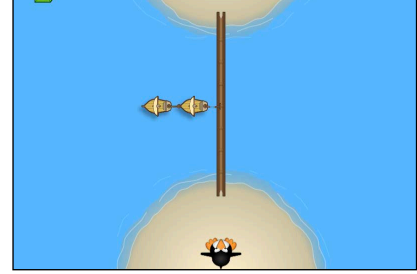
Classroom Connection

Use white boards, cubes, and game markers to bring this game into the classroom. Watch how students move blocks to find a solution. Discuss and model how, for example, three boats in a row is the same as two boats plus one boat. Watch the animation move the boats so the two sides are the same.

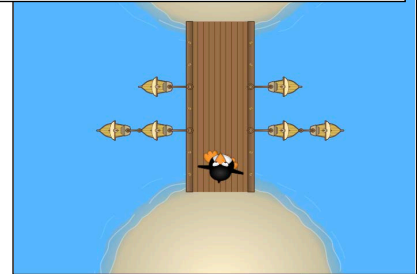
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Clicking the boats moves them from one side to the other.



In this grade level all puzzles can be solved using symmetry.



Greater Than, Less Than, Equal To 1



Order Sort

Kindergarten Greater Than, Less Than, Equal To 4 levels

Probing Questions

- Where will the orange box fall?
- How do you know which one to choose?
- What happens to Paco the Tomato after he eats the box?

What's Important Here?

Moving Paco to different sides of the screen allows the students to order from taller to shorter and shorter to taller. Note that when the boxes drop, they break into countable pieces that quantify and prove the comparison.

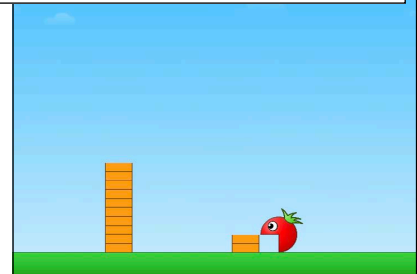
Emphasize the Connection

As students play ask them to verbalize the relationship. Create a word wall and/or sentence frames with the various comparison terms.

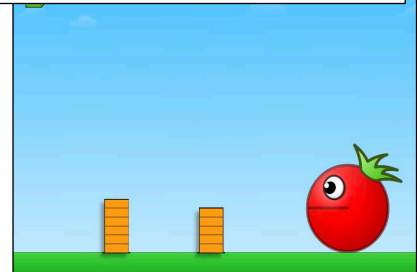
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Paco the Tomato always eats the smaller box first.



Point to one stack and have students verbally tell you, "That one's greater/less than the other."



Greater Than, Less Than, Equal To 2



Parachute

Kindergarten Greater Than, Less Than, Equal To 2 levels

Probing Questions

- What happens if you place JiJi here?
- What do you notice about the orange lines?
- How do you know where to place JiJi on the screen?

What's Important Here?

This game allows students to explore how the game works. They learn how to use the ramps and ladders and to avoid sliding into the walls.

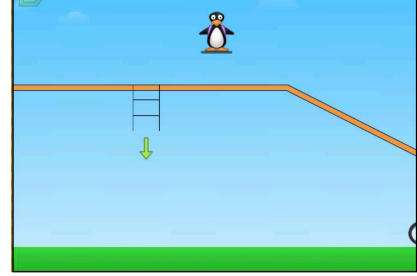
Classroom Connection

Consider creating or bringing in ramps to allow students to build JiJi ramps and roll marbles or small balls. This is a great science-math connection.

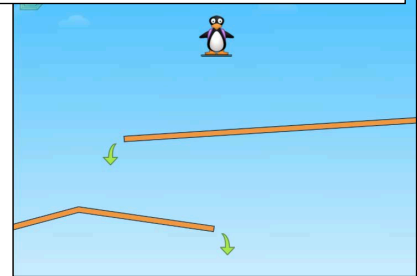
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The steps will be used in the next game to represent equality.



Some puzzles allow multiple correct places on the screen.



Greater Than, Less Than, Equal To 3



More Less Parachute

Kindergarten Greater Than, Less Than, Equal To 4 levels

Probing Questions

- What happens when you move the orange bar?
- How do you know how tall to make the tower?
- What happens if you choose this many?
- Is there another way to solve this problem?

Classroom Connection

Bring this game into the classroom using linking cubes. A ruler and small toy can be used to create the ramp. By giving each student blocks they can all find and test solutions for the given puzzle.

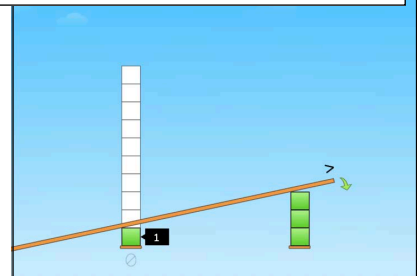
The Bigger Picture

Math is often seen as having one correct answer. Listing several correct answers can help students understand that math sometimes includes multiple solutions.

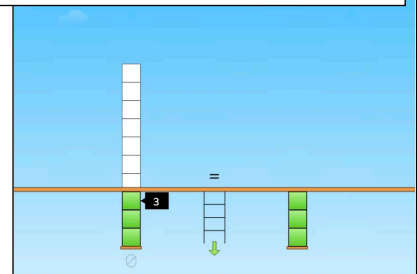
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Move the orange bar to find the directional green arrow.



Level 4 offers a mixture of greater than, less than, and equal to problems.



Greater Than, Less Than, Equal To 4



More Less Parachute Unstacked

Kindergarten Greater Than, Less Than, Equal To 4 levels

Probing Questions

- How do you know how many to choose?
- What is this puzzle asking you to find?
- What do you notice about the orange ramp?

Supporting Struggling Students

This game removes the visual support and will require some counting. If students struggle, linking cubes may help.

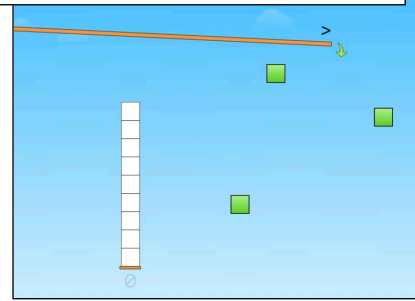
Emphasize the Connection

Create lists of words that compare like greater, less, fewer, more, taller, and shorter. Encourage students to explain the relationship in a complete sentence. When students are comfortable comparing the towers with words like greater, less, etc., encourage them to tell how many greater or fewer (e.g., 3 greater, 1 fewer).

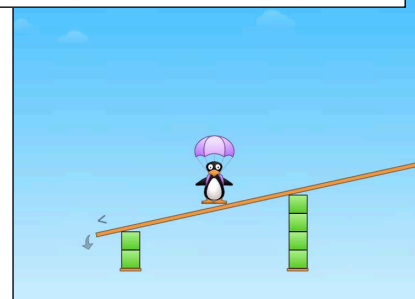
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There is no expectation to use the $<$ and $>$ symbols.



Level 4 offers a mixture of greater than, less than, and equal to problems.



Greater Than, Less Than, Equal To 5