# CONDITIONS

**Discussion:** Condition – what needs to happen before something else is allowed to happen. If…then. Have any of you ever heard your parent say, “IF you eat all your dinner, THEN you can have dessert?” or “IF you clean up your room, THEN we can go play?” Those are conditions. You have to do one thing first before you can do something else. One thing must be true before some other thing happens.

When your parents reward you like that, what is the condition of the reward? Just like your parents will check on your room to see if you cleaned it, a computer will also check on a statement to see if it is true to decide which action to take.

Sometimes we want to have an extra condition, in case the ‘if’ statement is not true. This extra condition is called an ‘else’ statement. IF you clean up your room, THEN you can play on the computer, ELSE your brother will get to pay on the computer. If it is true you clean up your room, you get to play on the computer. If it is false that your room is clean, your brother gets the computer.

**Game:** Conditionals Cards – As an example, let’s play with this deck of cards. IF I draw a 7, everybody claps. ELSE everyone says ‘Awwwww.’ Draw card and see if class reacts appropriately. Ask: What was the IF? What was the ELSE? Which condition was met? Repeat.

Now create a few ‘programs’ with your class that depend on things like a card’s suit, color, or value to award points. Write the program on whiteboard as an algorithm:

IF (card is red)

award teacher 1 point

ELSE

award class 1 point

Run one program at a time (using about 10 cards or 5 points as ending point). Draw cards and follow the program to see how many points each team scores in each round. Play several times with several different programs to help the students really understand conditionals.

Condition Statement #1

If \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

Then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Condition Statement #2

If \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

Then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Condition Statement #3

If \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

Then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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# Round 1

|  |  |
| --- | --- |
| Teacher | Class |
|  |  |

# Round 2

|  |  |
| --- | --- |
| Teacher | Class |
|  |  |

# Round 3

|  |  |
| --- | --- |
| Teacher | Class |
|  |  |