### **Periwinkle Preferences**

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#### Observations:



- There are different species of wracks
- And different species of periwinkles
- The periwinkles were found on different species of wracks



# MODEL

Different species of periwinkles prefer different species of wrack



• If free to choose, most black periwinkles will go to the knotted wrack and most yellow periwinkles will go to the bladder wrack and saw wrack.

## Null-Hypothesis:

• The periwinkles have no preference in wrack species.



Experiment:

- Fill aquarium with water.
- Attach bladder wrack and saw wrack together with string. Then attach the string to a rock so it won't float.
- Place this at one end of the aquarium.
- Tie the knotted wrack to rock.
- Place at other end of the aquarium.



- Place both species of periwinkles in the center of the aquarium.
- Then place a mesh over the aquarium so that the periwinkles cannot escape.
- Observe & record results.
- Repeat the previous steps twice more for more trials.

#### Imagine this as our aquarium...



Knotted Wrack:



Yellow Periwinkle (Flat Periwinkle):



Black Periwinkle (Common Periwinkle):



Saw Wrack:



Bladder Wrack:



# Results:



	Trial 1:		Trial 2:		Trial 3:	
	Yellow Periwinkle	Black Periwinkl	Yellow Periwinkl	Black Periwinkl	Yellow Periwinkl	Black Periwinkl
Knotted Wrack:	5	0	4	0	1	0
Saw Wrack & bladder Wrack:	1	3	2	2	5	3
No	0	3	0	4	0	3

## INTERPRETATION:

- We falsified our hypothesis...
- So, the null-hypothesis ended up being correct:
- The different periwinkles have no preference to the different species of wracks.



#### **Possible reasons for results:**

- On the third trial, the saw wrack and the bladder wrack were closer to the bottom of the aquarium, making it easier for the periwinkles to get to it.
- We accidentally confused the two species of black periwinkle- common periwinkle & flat periwinkle- during our observaton. In our experiment we should have used flat periwinkle to follow what we initially saw.



## Thanks for watching C

