

Agenda  
-inferences  
-group  
consensus

Scientists make observations about the world around them and use their inferential thinking to make sense of those observations.

obs + BK = Inference

### Quick Write

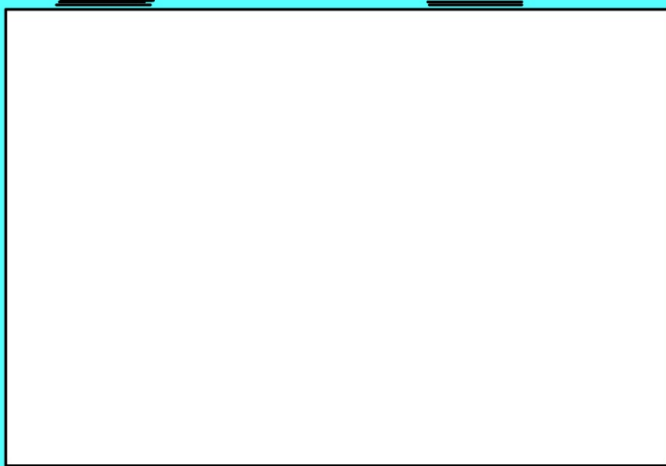
In your journal explain the difference between an observation and an inference.

#### Learning target:

I can use my observations and prior knowledge to make an inference about something I can not directly observe.

-  Sit up
-  Track the speaker
-  Ask questions
-  Respect your peers
-  Stay focused

## What is inside the black box?



Label your box with the letter

Draw the contents

Record evidence

Observation	Prior Knowledge	Inference
Hear roll.	Rolling objects are round.	Marble.

### Learning target:

I can use my observations and prior knowledge to make an inference about something I can not directly observe.

- Sit up
- Track the speaker
- Ask questions
- Respect your peers
- Stay focused

# Rules

- The boxes remain closed
- No drawing on the boxes
- No violent shaking or hard pressure

## Learning target:

I can use my observations and prior knowledge to make an inference about something I can not directly observe.

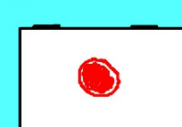
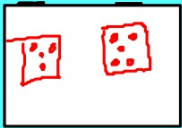
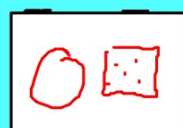
-  Sit up
-  Track the speaker
-  Ask questions
-  Respect your peers
-  Stay focused

A

B

C

D



Period 1

**Learning target:**

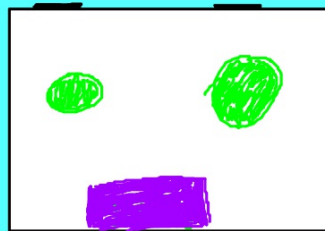
I can use my observations and prior knowledge to make an inference about something I can not directly observe.

## period 1 consensus models

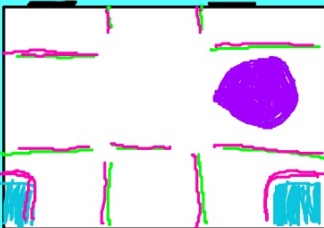
A



B



C



D



### Learning target:

I can use my observations and prior knowledge to make an inference about something I can not directly observe.

A

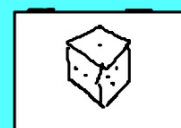
B

C

D



Period 2

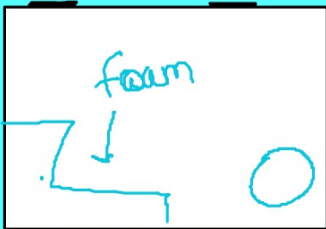


**Learning target:**

I can use my observations and prior knowledge to make an inference about something I can not directly observe.

## period 2 consensus models

A



B



C



D



### Learning target:

I can use my observations and prior knowledge to make an inference about something I can not directly observe.

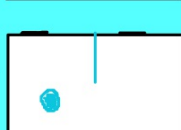
A

B

C

D

Period 3



**Learning target:**

I can use my observations and prior knowledge to make an inference about something I can not directly observe.



## period 3 consensus models

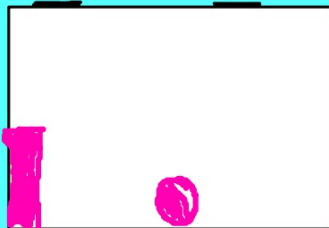
A



B



C



D

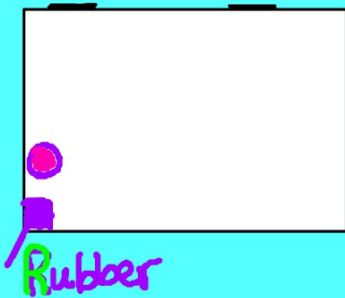


### Learning target:

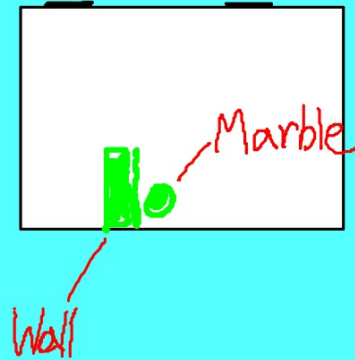
I can use my observations and prior knowledge to make an inference about something I can not directly observe.

## period 4 consensus models

A



B



C



D



### Learning target:

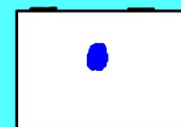
I can use my observations and prior knowledge to make an inference about something I can not directly observe.

A

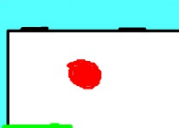
B

C

D



Period 4



Learning target:

I can use my observations and prior knowledge to make an inference about something I can not directly observe.

## Models

You created a model of your ideas of what is inside the box. You are using this model to communicate your ideas to other groups.

Create a consensus model

### **Learning target:**

I can use my observations and prior knowledge to make an inference about something I can not directly observe.

■ **Black Box:** Any system that can not be directly observed or easily understood.

■ **Model:** A model is a representation that explains how something is built or how it works. Used to test ideas

■ **System:** Two or more objects that work together or share the same space in a meaningful way.

**Learning target:**

I can use my observations and prior knowledge to make an inference about something I can not directly observe.

**As scientists what can you do to test your idea about what is inside the black box?**