Name: _____ 5A or 5B Date: _____ SEEDS Y2 L1

Evidence Set 1 – Handout 2

STOP & THINK: How can we figure out which model gives the best explanation for why the fish are dying?

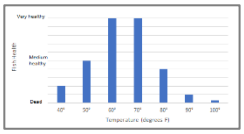
_____

_____

_____

Evidence 1: Fish and Temperature

Fish Health and Temperature



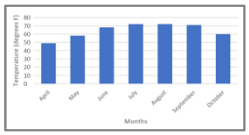
Questions:

1. What temperature range is ideal for fish?

   From: _____ To: _____

Questions:

Passion Puddle Average Water Temperatures (measured 1 foot below surface)

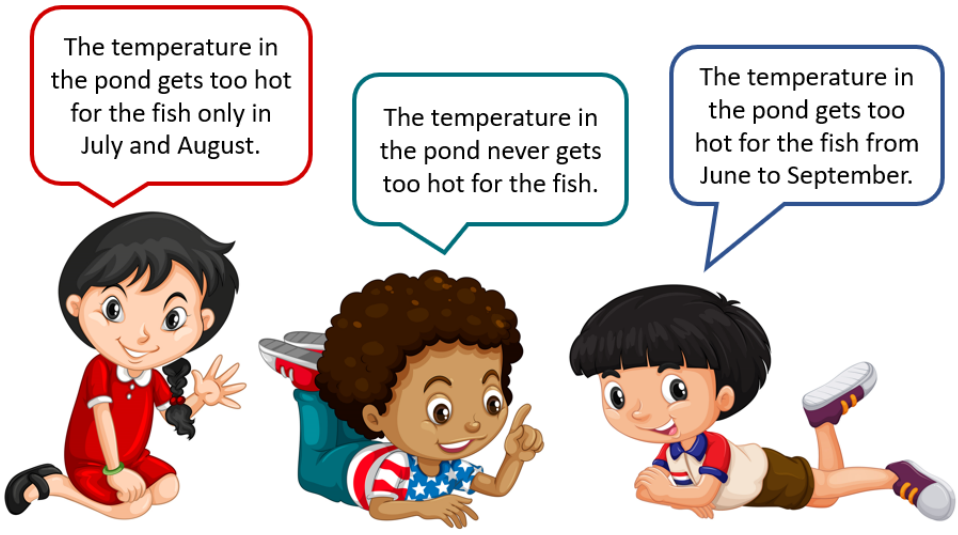


1. The temperature is highest in: (circle one)

   April August October

2. Three students each think something different about this evidence.

   Which one of them is right? (circle)



Name: _____ 5A or 5B Date: _____ SEEDS Y2 L1

Discuss with your partner:

- What have you learned about why the fish died from this evidence?
- What does this evidence show about the models? Draw a circle around the models this evidence supports and cross out the models that the evidence rules out.
- If the evidence is irrelevant to the model don't do anything.

A B C D

Try to come to agreement on your ideas and your reasons!

Evidence 2: Veterinary Report


Veterinary Report

Discuss with your partner:

- What have you learned about why the fish died from this evidence?
- What does this evidence show about the models? Draw a circle around the models this evidence supports and cross out the models that the evidence rules out.
- If the evidence is irrelevant to the model don't do anything.

A B C D

Try to come to agreement on your ideas and your reasons!

Question:

1. What does "low levels of air in blood" suggest about a possible cause of death?

_____

_____

_____

Name: _____ 5A or 5B Date: _____ SEEDS Y2 L1

Evidence 3: Water Quality

Questions:

1. Based on this evidence, did the fish die from pollution? Yes or No

Passion Puddle Water Quality Data

Discuss with your partner:

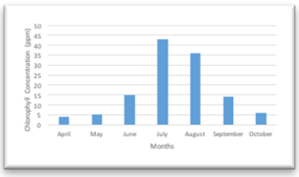
- What have you learned about why the fish died from this evidence?
- What does this evidence show about the models? Draw a circle around the models this evidence supports and cross out the models that the evidence rules out.
- If the evidence is irrelevant to the model don't do anything.

A B C D

Try to come to agreement on your ideas and your reasons!

Evidence 4: Pond Chlorophyll

Graph to Show the Amount of Chlorophyll in the Pond (measured 1 foot below surface)



Questions:

1. Circle all of the conclusions that are <u>correct</u>:
   a. Conclusion 1: There is the most algae in July
   b. Conclusion 2: There is the most chlorophyll in July
   c. Conclusion 3: There is the most chlorophyll in October

Discuss with your partner:

- What have you learned about why the fish died from this evidence?
- What does this evidence show about the models? Draw a circle around the models this evidence supports and cross out the models that the evidence rules out.
- If the evidence is irrelevant to the model don't do anything.

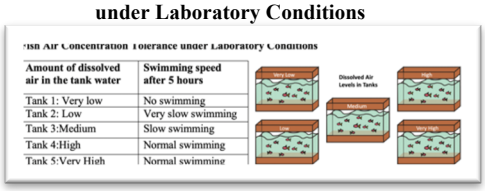
A B C D

Try to come to agreement on your ideas and your reasons!

Name: _____ 5A or 5B Date: _____ SEEDS Y2 L1

Evidence 5: Dissolved Air

Fish Air Concentration Tolerance under Laboratory Conditions



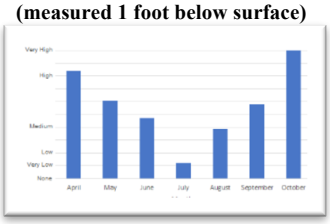
Amount of dissolved air in the tank water	Swimming speed after 5 hours
Tank 1: Very low	No swimming
Tank 2: Low	Very slow swimming
Tank 3:Medium	Slow swimming
Tank 4:High	Normal swimming
Tank 5:Very High	Normal swimming

Questions:

1. How much dissolved air do fish need to be healthy?

_____

Passion Puddle Dissolved Air in Water (measured 1 foot below surface)



2. Are there any months during the year during which the dissolved air levels are too low for fish to survive? Yes No

3. If you answered YES, which months? _____

Discuss with your partner:

- What have you learned about why the fish died from this evidence?
- What does this evidence show about the models? Draw a circle around the models this evidence supports and cross out the models that the evidence rules out.
- If the evidence is irrelevant to the model don't do anything.

A B C D

Try to come to agreement on your ideas and your reasons!

<u>BEFORE YOU GO:</u> Grab a sticky note and put your name on it.

- Look at the class model.
- On a sticky note, write down <u>two</u> questions you have about our explanation of why the fish died.
- Stick your note on the Question Chart.