Copy Cat

Name:_____________________

Part 1:
Beginning Thoughts
1) Draw lines between the pictures that you think form a pair.

2) The picture of the _________________ goes with the picture of the _________________ because they both _____________________________.

Class Debate

Discussion Sentence Frames

Starting a discussion of a pair
I think the picture of the __ goes with the picture of the __ because they both have ___.

Picture 1

Picture 2

Responding to a discussion of a pair
Group __ said __ and I agree with group them because __.
Or
Group __ said __ and I respectfully disagree with them because __.
Writing Exercise

3) I agreed with group ____ when they argued the picture of the __________________ goes with the picture of the __________________ because ____________________________ ____________________________ ____________________________.

4) I disagreed with group ____ when they argued the picture of the __________________ goes with the picture of the __________________ because ____________________________ ____________________________ ____________________________.

Instead I think the picture of the __________________ goes with the picture of the __________________ because ____________________________ ____________________________ ____________________________.

Part 2:
Class Discussion

*Have a class discussion and fill out the class sentence frames about what structures plants and animals have that humans have copied.

Fill out the following sentence frame for the picture that your teacher shows.

5) Penguins have ___________________________ that allow them to ___________________________, but humans cannot do this without ___________________________.
Explain Experiment

Procedure
1. Make a “jacket” using up to three materials. The jacket must be one piece and removable.
2. Record the materials that you used and draw a picture of your jacket.
3. Pull the metal person/thermometer out of the hot water and put your jacket on them.
4. Time how long it takes the thermometer to get to 40°C. You are not allowed to touch your jacket while the temperature is dropping.

Experiment

Results
Materials Used: ___________________  ___________________  ___________________

Draw a picture of the outside of your jacket.

If you cut your jacket in half, draw what you would see. Make sure to draw lines between your different materials and where they are in your jacket.

Time it took the thermometer to get to 40°C:__________________________
Part 3:

Class Discussion

As a class, look at the data from the experiment and discuss what this means for using each material in a jacket.

Writing Exercise

6) I think __________________, which mimicked ___________________________, worked the best as jacket material because ___________________________

______________________________

______________________________

7) I think __________________, which mimicked ___________________________, worked the worst as jacket materials because ___________________________

______________________________

______________________________

Class Debate

Discussion Sentence Frames

Starting a discussion of a pair

I think the __ which mimicked ___ worked the best/worst because ___.

Responding to a discussion of a pair

Group ___ said ___ and I agree with them because ___.

Or

Group ___ said ___ and I respectfully disagree with them because ___.

Number

Number

Number
Build the “Best” Jacket

8) The “best” jacket would be made out of (circle 3):
   Chammy  Cotton  Fat  Felt  Paper  Rug

9) The time for the “best jacket” to reach 40° was:___________________

Part 4:

Review Questions

10) Do humans do everything better than plants and animals? Yes  No
    If not, list one thing that a plant or animal can do better than a human and list a plant or animal is able to do that thing?

______________________________________________________________________________

11) What is one feature of an animal that you mimicked in your jacket?

______________________________________________________________________________

12) What is one animal that has this feature besides penguins?

______________________________________________________________________________

13) What is something else humans mimic from plants or animals?

______________________________________________________________________________

______________________________________________________________________________

15) Why do scientists argue?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

I can’t believe how much we have learned from animals.

And plants!