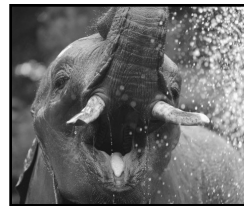
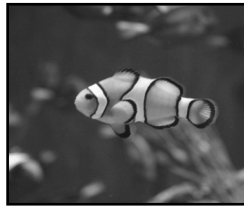


Name: _____

Group Members: _____

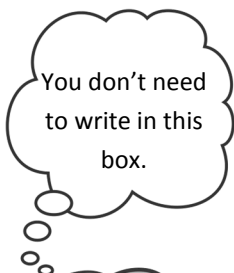
Beginning Thoughts

Draw lines between the pictures that you think form a pair.



The picture of the _____ goes with the picture of the _____

because _____.



Discussion Sentence Frames

Starting a discussion of a pair

I think the picture of the _____ goes with the picture of the _____ because _____.
Picture 1 Picture 2

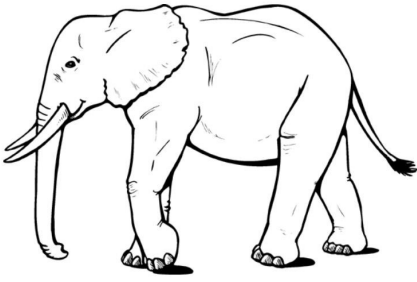
Responding to a discussion of a pair

Group _____ said _____ and I agree with group them because _____.

Number Or

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

Number



What can we Learn From Plants and Animals?



Discussion Summary

I **agreed** with group _____ when they argued the picture of the
Number
 _____ goes with the picture of the _____
 because _____.

I **disagreed** with group _____ when they argued the picture of the
Number
 _____ goes with the picture of the _____
 because _____

instead I think the picture of the _____ goes with the picture of the
 _____ because _____



**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.

Penguins have _____ that allow them to

but humans cannot do this without _____.

Procedure

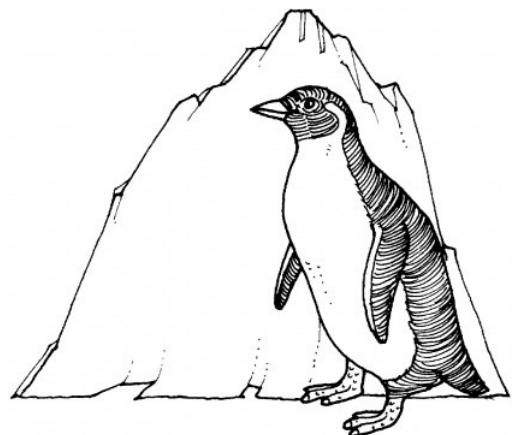
1. Make a “jacket” using up to three materials. The jacket must be one piece and removable.
2. Record the materials that you used and draw a picture of your jacket.
3. Pull the metal person/thermometer out of the hot water and put your jacket on them.
4. Time how long it takes the thermometer to get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

Results

Materials Used: _____

Draw a picture of your jacket:

Time to get to 40°C: _____



Materials

- Shammy
- Thick Felt
- Fat
- Craft Feathers
- Thin Felt
- Cotton



Animal Structures

- Blubber
- Long Fur
- Outer Feathers
- Short Fur
- Skin
- Inner Feathers

Summary

I think _____ which mimicked _____ worked

Material Animal Structure

the best because _____

I think _____ which mimicked _____ worked

Material Animal Structure

the worst because _____

You do not need to write in this box.



Discussion Sentence Frames

Starting a discussion of a pair

I think the _____ which mimicked _____ worked the best/worst because _____.

Materials Animal Structure

Responding to a discussion of a pair

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

Number

Or

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

Number

Review Questions

1. Do humans do everything better than plants and animals? If not, list one thing that a plant or animal can do better than a human?

2. What is one feature of an animal that you mimicked in your jacket?

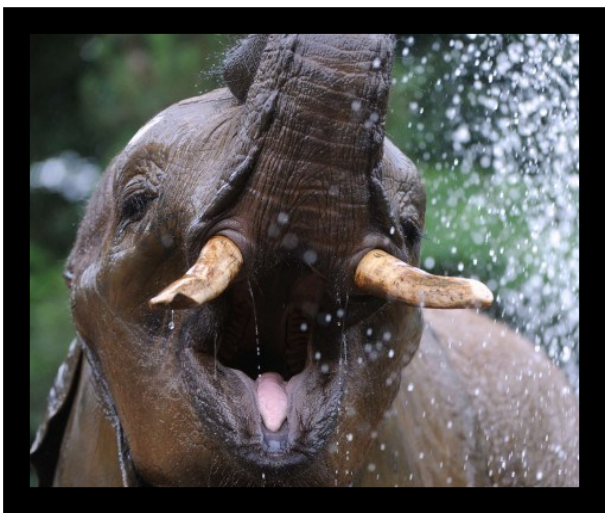
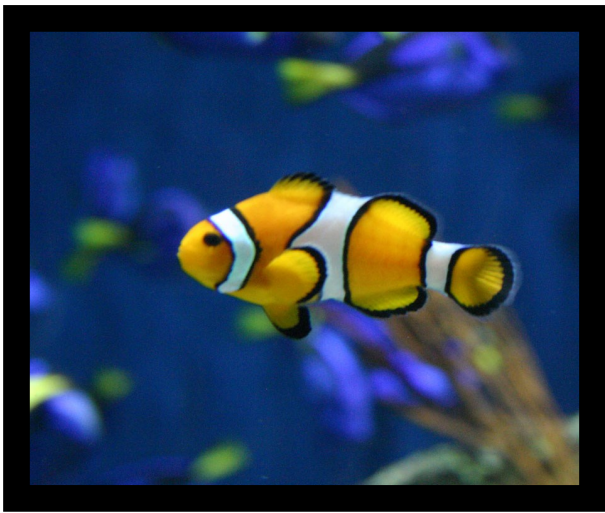
3. What is one animal that has this feature besides penguins?

4. What is something else humans mimic from plants or animals?

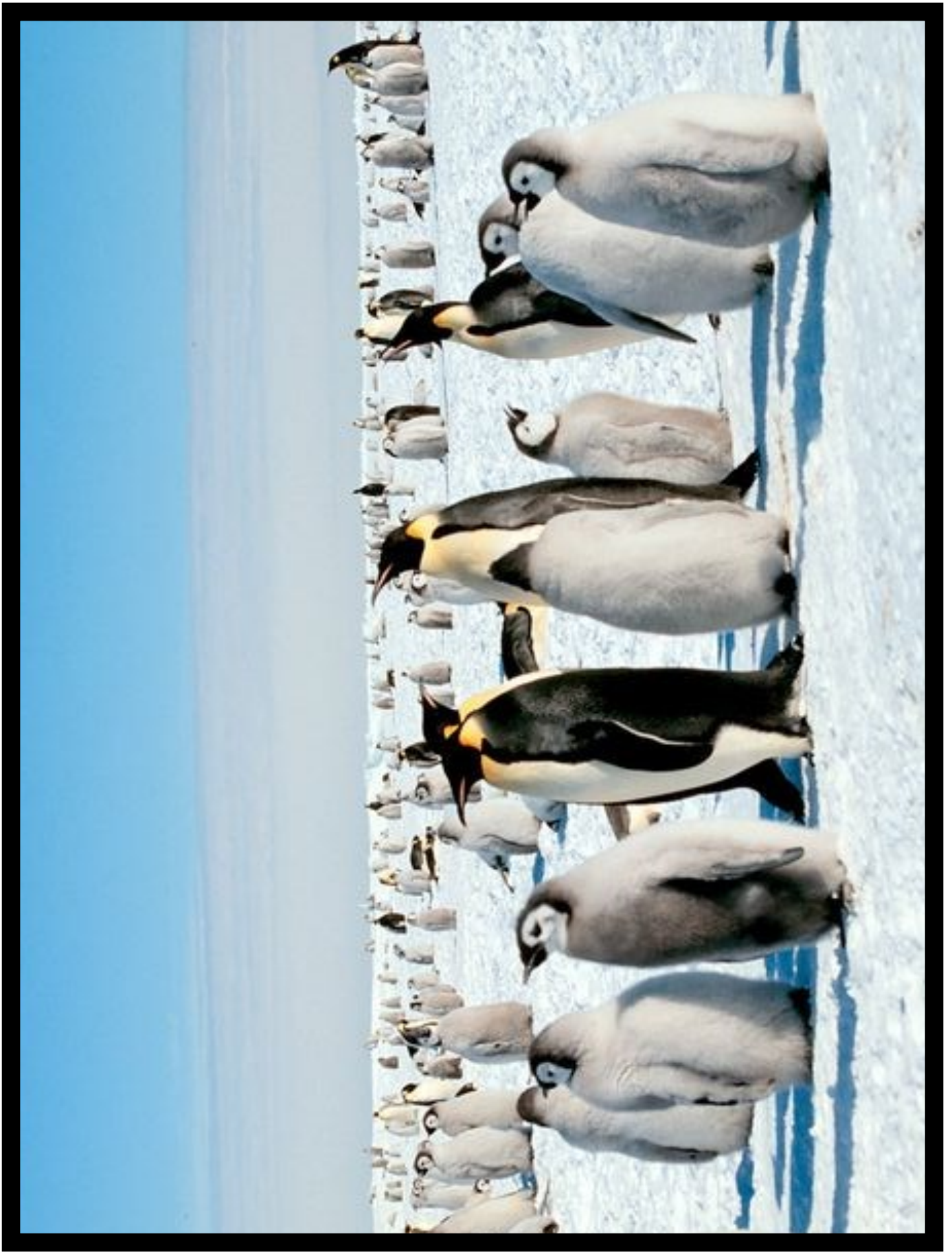
| Plant or Animal we are Mimicking | Trait we are Copying | Invention |
|----------------------------------|----------------------|-----------|
|----------------------------------|----------------------|-----------|

5. Why do scientists argue?









Use the Following Sentence Frames to Discuss Which Pictures Make A Pair

Use the following words to help you.



| | <u>Pictures</u> | | |
|------------------|-------------------|--------------|--|
| Bird | Elephant | Plane | |
| Lily Pads | Scuba Gear | Roots | |
| Shower | Straw | Raft | |
| | Fish | | |

Starting a discussion of a pair

I think the picture of the _____ goes with the
Picture 1
picture of the _____ because _____.
Picture 2

Responding to a discussion of a pair

Group _____ said _____ and I agree with them
Number Summary of What You Heard
because _____.

Or

Group _____ said _____ and I respectfully
Number Summary of What You Heard
disagree with them because _____.

What have we learned from animals?



Birds have _____
that allow them to _____
but humans cannot do this without _____.

Elephants have _____
that allow them to _____
but humans cannot do this without _____.

Fish have _____
that allow them to _____
but humans cannot do this without _____.

What have we learned from plants?



Lily Pads have _____
that allow them to _____
but humans cannot do this without _____.

Roots have _____
that allow them to _____
but humans cannot do this without _____.



Cotton



Shammy



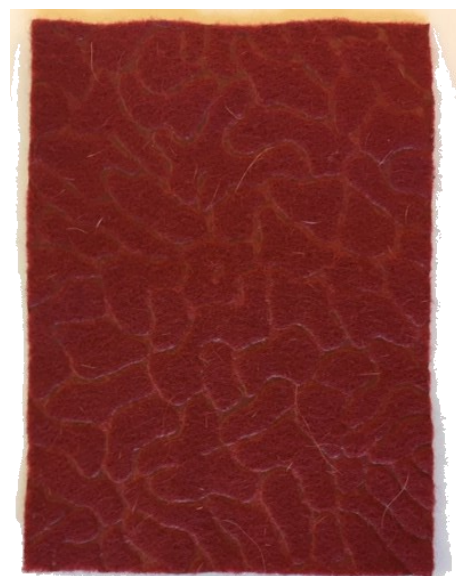
Craft Feathers



Fat



Thick Felt



Thin Felt

| Group | Materials Used | | Time to get to 40°C | Notes |
|-------|--|----------------------------|---------------------|-------|
| 1 | Cotton Craft Feathers Thick Felt | Shammy Fat Thin Felt | | |
| 2 | Cotton Craft Feathers Thick Felt | Shammy Fat Thin Felt | | |
| 3 | Cotton Craft Feathers Thick Felt | Shammy Fat Thin Felt | | |
| 4 | Cotton Craft Feathers Thick Felt | Shammy Fat Thin Felt | | |
| 5 | Cotton Craft Feathers Thick Felt | Shammy Fat Thin Felt | | |
| 6 | Cotton Craft Feathers Thick Felt | Shammy Fat Thin Felt | | |
| 7 | Cotton Craft Feathers Thick Felt | Shammy Fat Thin Felt | | |

Use the Following Sentence Frames to Discuss How Well the Materials Functioned

Materials

Use the following words to help you

Shammy

Thick Felt

Fat

Craft Feathers

Thin Felt

Cotton

Animal Structures

Blubber

Long Fur

Outer Feathers

Short Fur

Skin

Inner Feathers



Starting a discussion of a pair

I think _____ which mimicked _____ worked
the _____ because _____.
Material Animal Structure Best or Worst

Responding to a discussion of a pair

Group _____ said _____ and I agree with them
because _____.
Number Summary of What You Heard

Or

Group _____ said _____ and I respectfully
disagree with them because _____.
Number Summary of What You Heard