Name:_____

Hitchhiking Seeds

1) **Dandelion Seeds**

Picture of Dandelion Plant

Picture of Dandelion Seed

This seed's size is (circle one): large medium small

This seed's weight is (circle one): heavy light

This seed's strength is (circle one): easy to damage hard to damage

Other observations:_____

Predict the method the seeds travel by _____

---

2) **Tomato Seeds**

Picture of Tomato Plant

Picture of Tomato Seed

This seed's size is (circle one): large medium small

This seed's weight is (circle one): heavy light

This seed's strength is (circle one): easy to damage hard to damage

Other observations:_____

Predict the method the seeds travel by _____

3) **Burr Clover Seeds**

Picture of Burr Clover Plant

Picture of Burr Clover Seed

This seed's size is (circle one): large medium small

This seed's weight is (circle one): heavy light

This seed's strength is (circle one): easy to damage hard to damage

Other observations:_____

Predict the method the seeds travel by _____

---

4) **Palm Seeds**

Picture of Palm Plant

Picture of Palm Seed

This seed's size is (circle one): large medium small

This seed's weight is (circle one): heavy light

This seed's strength is (circle one): easy to damage hard to damage

Other observations:_____

Predict the method the seeds travel by _____

Read Hitchhiking Seeds as a class before moving on.

5) Can plants disperse their seeds on their own (circle one)? Yes No

6) If no, what do they need: _____

_____

_____

7) _____

caused the dandelion seeds to be dispersed to other areas.

My prediction was (circle one): correct incorrect

8) _____

caused the tomato seeds to be dispersed to other areas.

My prediction was (circle one): correct incorrect

9) _____

caused the burr clover seeds to be dispersed to other areas.

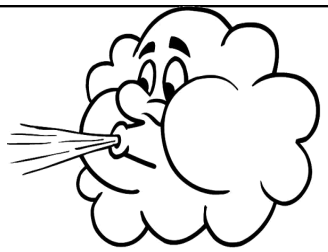
My prediction was (circle one): correct incorrect

10) _____

caused the coconut to be dispersed to other areas.

My prediction was (circle one): correct incorrect

11) Changes in the amount of wind would affect which type of plant (circle affected plants)?



Dandelion Tomato

Burr Clover Palm

The effect of less wind would be: _____

_____

This would cause (more less the same) seed dispersal.

Circle One

12) Changes in the amount of sugar would affect which type of plant (circle affected plants)?

Dandelion Tomato

Burr Clover Palm

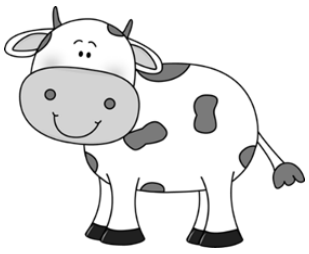
The effect of more sugar would be: _____

_____

This would cause (more less the same) seed dispersal.

Circle One

13) Changes in the amount of animals would affect which type of plant (circle affected plants)?



Dandelion Tomato

Burr Clover Palm

The effect of more animals would be: _____

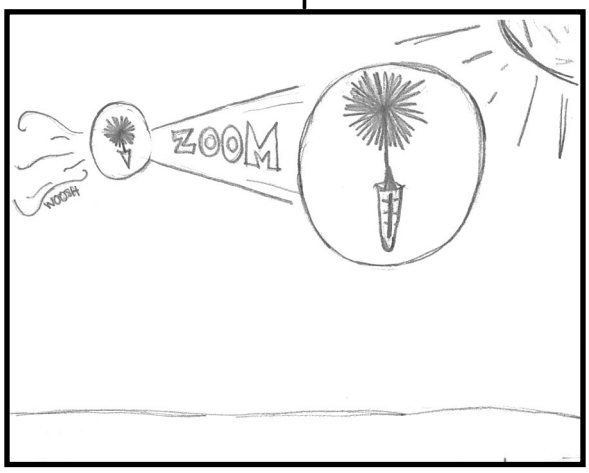
_____

This would cause (more less the same) seed dispersal.

Circle One

14) Draw what happens to the dandelion seed in the step 2 and step 3 boxes.

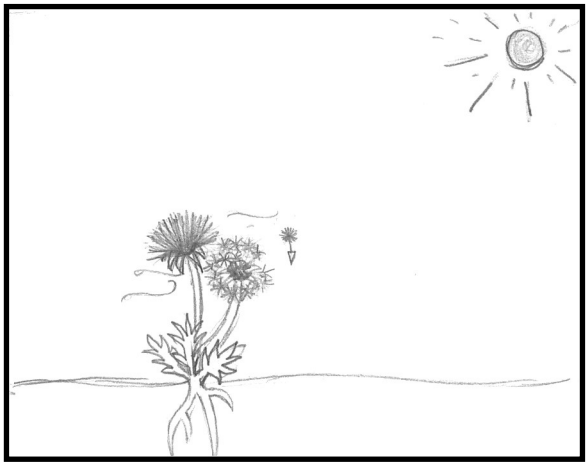
Step 1



Step 2

Step 3

Step 4



15) Is this a cycle? Yes No

16) Do people affect seed dispersal? Yes No

17) If yes what are some of the ways? _____

_____

_____

Making Seeds

You are going to make a seed that can be dispersed by either wind or animals. Then you will test how well the seed performs by either putting it in front of a wind source (fan) or seeing how well it stays on an animal's fur (stuffed animal).

18) I want to make a seed that is dispersed by (circle one): wind animal

19) Circle **three** materials that you would like to use to make your seed:

kleenex	tape	modeling clay
styrofoam ball	paperclips	foil
tissue paper	paper	toothpicks
pipe cleaners	cotton balls	velcro (max 5)

20) I picked _____ because
Material 1

_____

21) I picked _____ because
Material 2

_____

22) I picked _____ because
Material 3

_____

Get your materials and build your seed. Once your seed is completed, set it on the seed testing tray.

23) I predict example seed 1 was made to be dispersed by: wind animals
(circle one)

because_____

My prediction was (circle one): correct incorrect

24) I predict example seed 2 was made to be dispersed by: wind animals
(circle one)

because_____

My prediction was (circle one): correct incorrect

25) I predict example seed 3 was made to be dispersed by: wind animals
(circle one)

because_____

My prediction was (circle one): correct incorrect

As a class, test the seeds. Fill out the data table for your seed and the three classmates' seeds that are in your group.

Data Table

Student Letter	Planned Dispersal Method (circle one)	Number of Shakes Stayed on Animal	Distance Seed Traveled (cm)	Observations
A	Wind Animal			
B	Wind Animal			
C	Wind Animal			
D	Wind Animal			

26) What do the seeds that stayed on the animal the longest have in common?

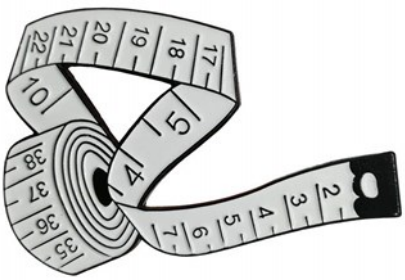
_____

_____

27) What do the seeds that fell off the animal quickly have in common?

_____

_____



28) What do the seeds that traveled the farthest distance have in common?

_____

_____

29) What do the seeds that traveled the shortest distance have in common?

_____

_____

30) If I change the _____ used in my seed to

Material I Used

_____ it would cause my seed to _____

Material I Could Have Used

_____

31) What does it mean to do a good job of being dispersed by wind? _____

32) What does it mean to do a good job of being dispersed by animals?_____

33) Are most seeds good at being dispersed by both wind and animals (circle one)? Yes No

34) What is the purpose of a seed sticking to animals or being blown by the wind?_____

_____

35) Does being blown by the wind or staying attached to animals solve the same problem (circle one)? Yes No

36) I think having seed dispersed by (wind animals) is a better method of seed dispersal because
Circle One

_____

_____

Make a poster with your group to teach your buddies about seed dispersal and how humans influence it. Decide if your group would like to highlight seeds that are dispersed by wind or animals. Then decide which presenter you will be (1-4) and get the appropriate poster piece from your teacher.

37) Our group will present on seeds dispersed by (circle one): wind animals

38) I will be presenter (circle one): 1 2 3 4

Group 1

Student A's Seed:	Student B's Seed:
Student C's Seed:	Student D's Seed: