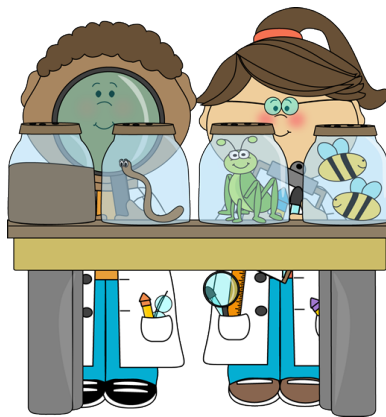




A HYBRID DIGITAL BUS PROJECT:

Kilo: Let's Observe!

— Second Grade —



NAME: _____

GRADE: _____

SCHOOL: _____

TEACHER: _____

FAVORITE THING TO OBSERVE:

2nd
grade



Don't forget to have the digital copy
of this project ready to go on your
computer.

You'll need it to click on all of the
links to the videos!

www.digitalbus.org



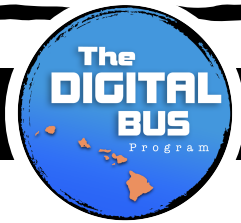
Aloha!

You are about to start a Digital Bus project. Get some colored pencils and make sure your brain is ready to learn.

Have fun and good luck!



my notes... my drawings... my thoughts... my ideas...



Kilo: Let's observe!

Part 1



Aloha! My name is Kumu Dav, and I am the Maui Digital Bus teacher.



What is your name?

My name is



It's nice to meet you!



Video 3.1



If you are ready to do a fun project with me, watch this video:

[CLICK HERE](#)

I am ready!





In this project you will learn to **observe** and make observations!

Can you write the word **OBSERVE** in the box?

Use colors if you'd like!

Write the word: observe



To **OBSERVE** means to use your **senses** to pay attention to things around you.



You have many different senses. Can you think of one?

What is one of your senses?





Humans have five senses! Let's list all of them here:

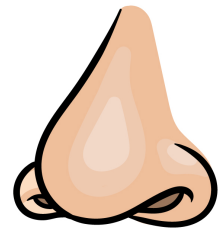


SIGHT
HEARING
SMELL
TASTE
TOUCH



Can you connect your sense with the correct part of your body?

SIGHT



HEARING

SMELL



TASTE



TOUCH





When we observe, we can use one of our senses or many of our senses!



What senses are you using when observing this video?
[CLICK HERE](#)

What sense are you using?



Can you and your class come up with more examples of using two senses (or more) at the same time?

When do you use two (or more) senses?





An **observation** is one thing you notice about something you are observing.



What is one observation you can make about this bird?

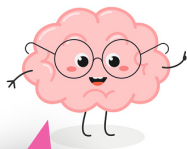
One observation



When you are making observations, you are using your senses and your brain to think about what you are observing!

Did you know that we observe things ALL OF THE TIME. We are always making observations.

Today we are just learning HOW we do it!



Hello, I'm your brain, and I help you make observations!



Look around the room, and write down one observation you can SEE with your EYES.

Write one thing you can SEE



Close your eyes, and write down one observation you can HEAR with your EARS.

Write one thing you can HEAR



Close your eyes again, and write down one observation you can FEEL with your SKIN.

Write one thing you can FEEL



Close your eyes again, and write down one observation you can SMELL with your NOSE.

Write one thing you can SMELL





Are you ready for another video?

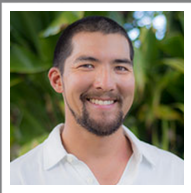


Video 3.2



Let's find out what you can observe with your eyes inside The Digital Bus.
Make sure to pay attention!

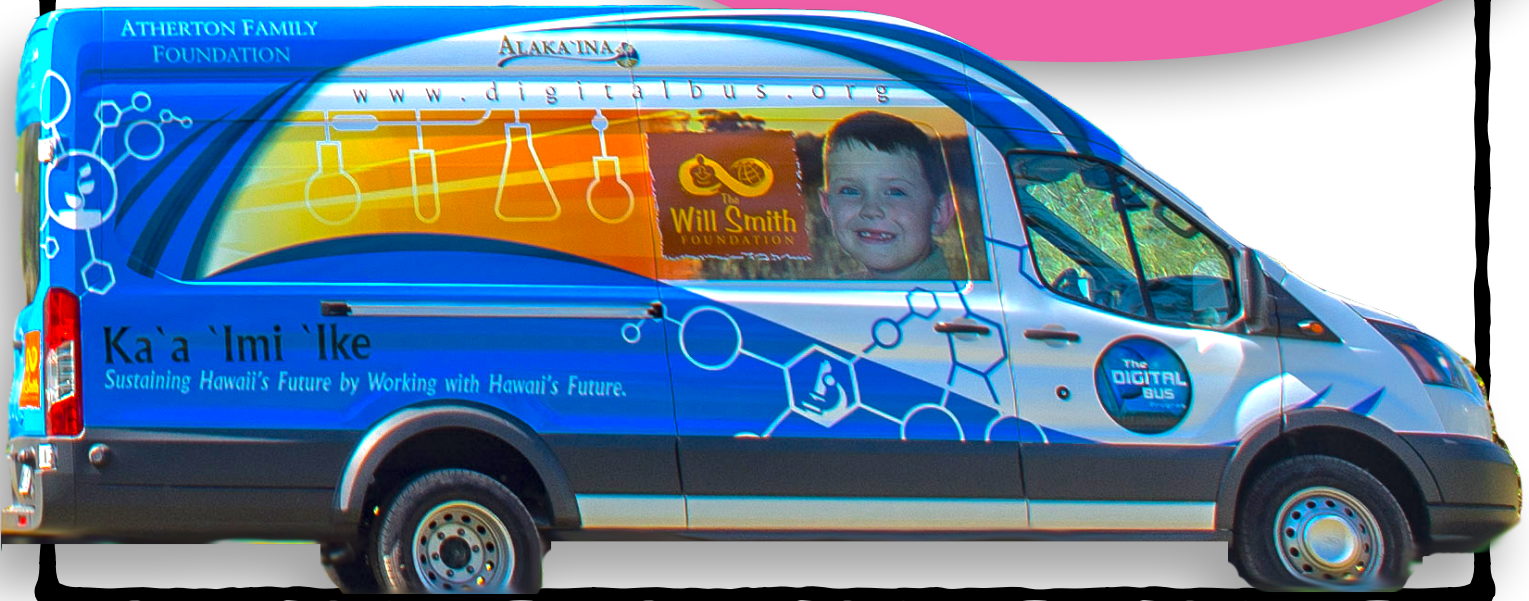
Paying attention means I'm observing!



The Digital Bus is so cool! I'm going to bring it to your school and you'll be able to go inside!



Make sure you pay attention and keep making good observations so you can have fun inside The Digital Bus!





Can you draw one observation you made from inside The Digital Bus?

Draw one thing you observed



You are getting good at observing and making observations!



Next time we'll explore what to do when we can't see the things we wish to observe because they are too far away, or they are too little.



A hui hou! See you soon.



You are all done with the PART 1.

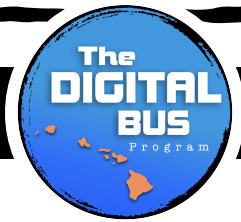
Great work!

Let's wait until everyone is ready before continuing to

PART 2



my notes... my drawings... my thoughts... my ideas...



Kilo: Let's observe!

Part 2



Hi again!
Last time we learned what it means to **observe** and to make **observations**.



Can you look **outside** and draw ONE thing you observe?

Draw one thing you observe outside

A large, empty rectangular area with a blue border, intended for drawing. It has a speech bubble tail pointing towards the top right.



Did you observe anything outside that was **very far away**?

Write one thing that was very far away



Video 3.3



It can be hard to observe things that are far away or if they are very small. Sometimes we need **special tools** that will help us make observations

Let's go back in The Digital Bus to learn about these tools!

[CLICK HERE](#)



Below are **the three tools** that help us observe things with our eyes. Can you write down their names?

What is this called?



What is this called?



What is this called?





The **binoculars** are used to observe things that are far away.



Can you **draw one thing** that you would need binoculars to observe?

Draw one thing you need binoculars to observe:



What is the name of the thing you observed?



There are other tools that work like binoculars to observe things far away, but they are even more powerful. They are called **spotting scopes** and **telescopes!**



The **magnifying glass** is used to observe things that are small.



Can you **draw one thing** that you would need a magnifying glass to observe?

Draw one things you need a magnifying glass to observe:



What is the name of the thing you observed?



Magnifying glasses come in all shapes, sizes, and power! Some can make things look twice as big, some can make things look ten times bigger!



The **microscope** is used to observe things that are very small.



Can you **draw one thing** that you would need a microscope to observe?

Draw one thing you need a microscope to observe:



What is the name of the thing you observed?



There are many types of microscopes, some can fit in your pocket, some take up an entire room! Each type of microscope is used for different things.



Great job!

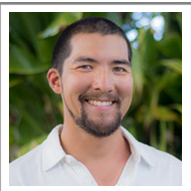


You now know what each of these tools do!



Are you ready to practice using them?!

Wait. I get to use all of these?!



Yes! You will make observations of things that are far away and things that are small using many different types of tools!

You will also use your EARS, NOSE, and SKIN to make observations that your EYES can not make!

You'll do all of this when I come visit you and when you go into The Digital Bus!



Video 3.4

But first you have to learn how to use each tool.
It's time for another video.
[CLICK HERE](#)



PART 2 isn't done yet.

You still need to visit The Digital Bus when it comes to your school
and do a scavenger hunt!

After that you and your class will move on to PART 3.



my notes... my drawings... my thoughts... my ideas...

The Digital Bus Scavenger Hunt !



Using all of your special tools, try to make one observation about each of the following things! And circle the tool you used.

Something that flies



My observation: _____

A person



My observation: _____

A tree far away



My observation: _____

Something round



My observation: _____

A mountain



My observation: _____

The middle of a flower



My observation: _____

The edge of a leaf



My observation: _____

Soil



My observation: _____

A tiny thing that moves



My observation: _____

Something made by people



My observation: _____

An eyeball



My observation: _____

Letters that are too far to read



My observation: _____

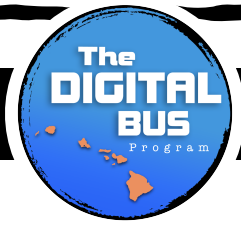
Something red



My observation: _____

This is extra space for your observations! Draw or write down some of your amazing observations.

This is extra space for your observations! Draw or write down some of your amazing observations.



Kilo: Let's observe!

Part 3



I hope you had fun on The Digital Bus making observations!

Can you write one word that describes how you felt on The Digital Bus?

One word about The Digital Bus:



You used all of your senses and your brain to make observations.

Can you list all five of your senses?

Your five senses:

- 1.
- 2.
- 3.
- 4.
- 5.





In a complete sentence, can you write one observation you made using the binoculars?



Write one observation you made using the binoculars

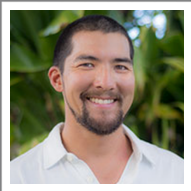


In a complete sentence, can you write one observation you made using the magnifying glass?



Write one observation you made using the magnifying glass





In a complete sentence, can you write one observation you made using the microscope?



Write one observation you made using the microscope



In a complete sentence, can you write one observation you made using only your SKIN?

Write one observation you made using your skin





You want to go whale watching, what tool do you bring to help you observe the whales?

Tool for observing whales

YOU



You go the forest with your uncle, what senses will you use to observe birds?

Senses for observing birds

YOU



You bring red sand back to your classroom, what senses could you use to help you observe it?

Senses for observing sand

YOU



You help your auntie bake (and eat) cookies, what senses would you use to make observations?

Senses for baking and eating cookies

YOU



Can you draw **the coolest thing** that you observed during this project?

Coollest thing you observed



What are TWO observations you made about this cool thing?

1.

2.

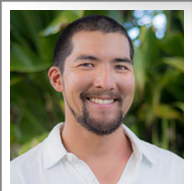


It is very important for us to observe everything around us. Here are some examples!



The Hawaiians observe the stars, and thanks to their observations they learn to navigate across the ocean!

The Hawaiians also make observations about how different plants grow by observing the moon, the water, and the soil. Using these observations they are able to grow food for their entire family and community!



Can you and your class think of some other reasons how observing and making observations can be important?

Why is observing important?





I have one more question:
What was your FAVORITE part of this project?

Please use a complete sentence to answer!

My favorite part of the project:



You finished the project!

Congratulations 👍 😊



Video 3.5



Here is one last video for you!

[CLICK HERE](#)

A hui hou!

See you next time,
Kumu Dav

my notes... my drawings... my thoughts... my ideas...



The mission of The Digital Bus is to encourage interest in science and technology among the underrepresented student populations in grades K-12. Currently operated by The Maui Economic Development Board (MEDB), a non-profit 501(c)3, The Digital Bus program serves as part of the organization's educational outreach goal to expand the next generation of leaders and scientists capable of developing and supporting critical thinking for the future. We offer a state of the art mobile learning platform, field-based science projects, and interactive virtual lessons to K-12 students that incorporate technology & culture.

This hardcopy workbook is designed to be used in tandem with the digital version, which allows access to video and resource links.

Please feel to contact us with any questions:

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