Dear Parents,

Coding is considered a great second language. Being able to understand computer language and how to use computers, will help in whatever career path your child may choose. From a kids point of view, the most important reason to learn to code is that it can be so much fun because you can develop your own games, you can program a robot, or create your own website.

The team here at Green Mouse Academy encourages you, as the parent, to learn right along with your child. You do not have to be a coding genius to complete the lessons we have provided. There are also hundreds of activities and tutorials on Code.org, so once your child has completed the activities we provided, let them explore the site and have fun coding with so many of their favorites characters and games like Elsa, Angry Birds, Minecraft, etc.

What you'll need to get started:

- A tablet, computer, or smartphone
- The internet, to be able to access code.org

Join us for these fun lessons at https://studio.code.org/s/coursec-2019. You will notice we have chosen Course C. Once your child completes this course, encourage him/her to try out the other courses.

To learn more about our Technology Arts programs or if you have any questions, please visit us at www.greenmouseacademy.com.

3, 2, 1, CODE!

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K-2 Code.org Activities

Week 1: Sequencing, Algorithms, & Debugging Activity Card 1

- Happy Maps – Unplugged Activity (see pdf)
- Programming with Angry Birds https://studio.code.org/s/coursec-2019/stage/4/puzzle/1
- Debugging in Maze https://studio.code.org/s/coursec-2019/stage/5/puzzle/1

Week 2: Binary Bracelets & Sequencing Activity Card 2

- Binary Bracelets – Unplugged Activity (see pdf)
- Collecting Treasure with Laurel https://studio.code.org/s/coursec-2019/stage/6/puzzle/1
- Creating Art with Code https://studio.code.org/s/coursec-2019/stage/7/puzzle/1

Week 3: Cyberbullying & Loops Activity Card 3

- Screen Out the Mean – Unplugged Activity (see pdf)
- Loops with Rey and BB-8 https://studio.code.org/s/coursec-2019/stage/10/puzzle/1
- Harvesting Crops with Loops https://studio.code.org/s/coursec-2019/stage/11/puzzle/1

Week 4: Powerful Passwords & Loops Activity Card 4

- Powerful Passwords – Unplugged Activity (see pdf)
- Looking Ahead with Minecraft https://studio.code.org/s/coursec-2019/stage/12/puzzle/1
- Sticker Art with Loops https://studio.code.org/s/coursec-2019/stage/13/puzzle/1

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Activity Card 1: Sequencing, Algorithms, & Debugging (Week 1)

Explore

Welcome to Sequencing, Algorithms, and Debugging! During this week of activities, you will learn how to translate an algorithm into a program, decode and run a program created by someone else, and identify and address bugs or errors in sequenced instructions.

Create

Activity 1: Happy Maps – Unplugged Activity

Print and complete the **Happy Maps** pdf worksheet. An Algorithm is a list of steps to finish a task. In this activity, you will help the *flurb* get to the fruit, by circling the correct arrow(s), For example, in the first exercise, the fruit is above the *flurb*, so you would need to circle the UP arrow, and so on. On the last page, draw your own *flurb* and fruit and see if you can write to correct algorithm to get the *flurb* to the fruit in the shortest amount of directions! You can also watch, https://studio.code.org/s/course1/stage/1/puzzle/1 if you have any questions.

Activity 2: Programming with *Angry Birds*

Complete lesson 4, **Programming with *Angry Birds***. You can find it here: https://studio.code.org/s/coursec-2019/stage/4/puzzle/1 Be sure to watch the video first then complete the practice puzzles.

Activity 3: Debugging in Maze

Complete lesson 5, **Debugging in Maze**. You can find it here: https://studio.code.org/s/coursec-2019/stage/5/puzzle/1 Don't forget to watch the video first then complete the practice puzzles.

Share

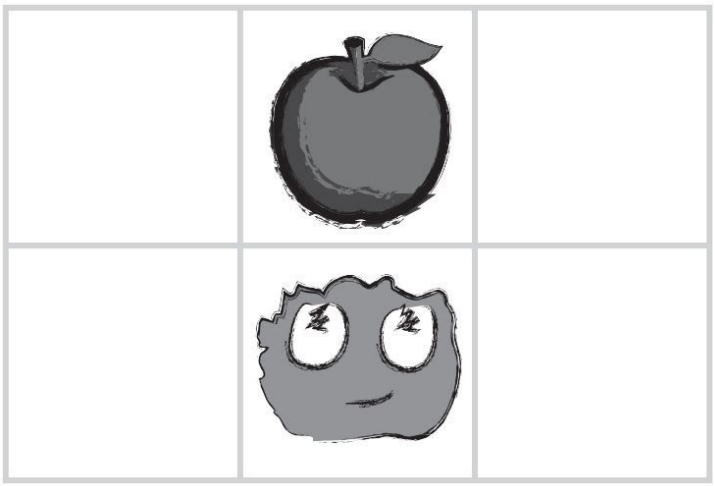
Parents ask guiding questions about your child's time on Code.org. Take pictures and post to social media and tag us at #greenmousecafe on Twitter and #greenmouseacademy on Facebook! Below are a few guiding questions:

A. Can you tell me what debugging means?
B. What was your favorite activity, Programming with *Angry Birds* or Debugging with *Scrat* from *Ice Age*?
C. Can you write an Algorithm for making a PB&J Sandwich? I can start the first set of steps.
    1. Grab 2 pieces of bread and place on a plate.
    2. Grab a butter knife, a jar of peanut butter, and a jar of jelly.
    3. _____
    4. _____
    5. _____

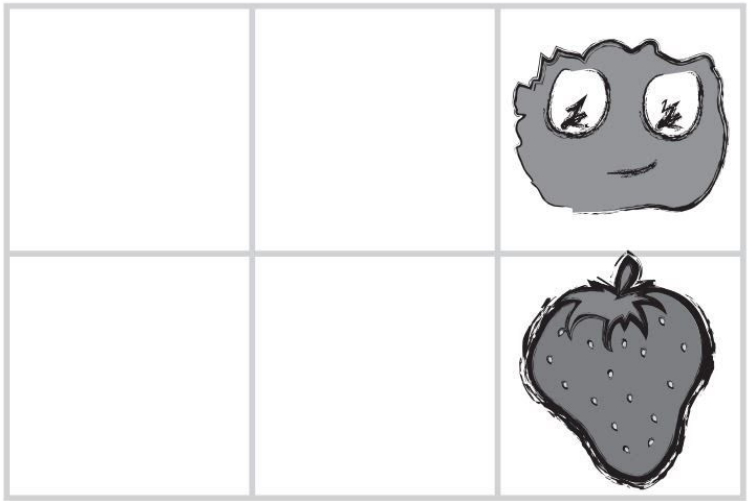
Name(s)_____ Period _____ Date _____

Happy Maps

1. Which way should the Flurb step to get to the fruit?

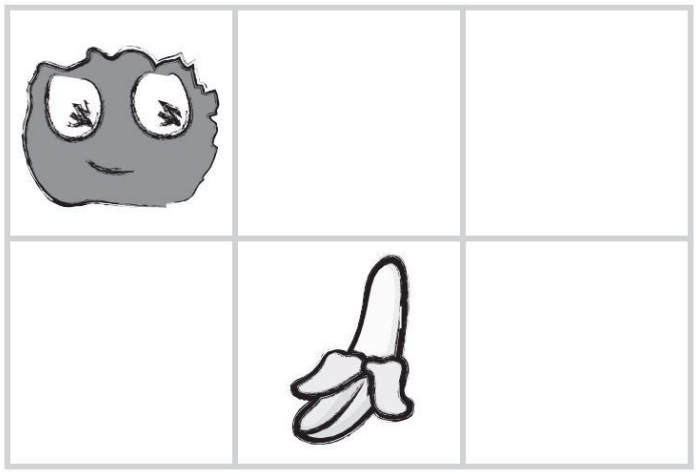


2. Which way should the Flurb step to get to the fruit?

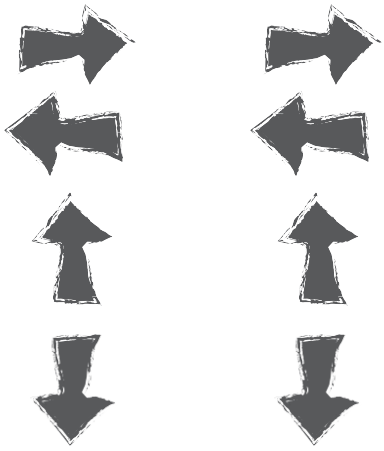


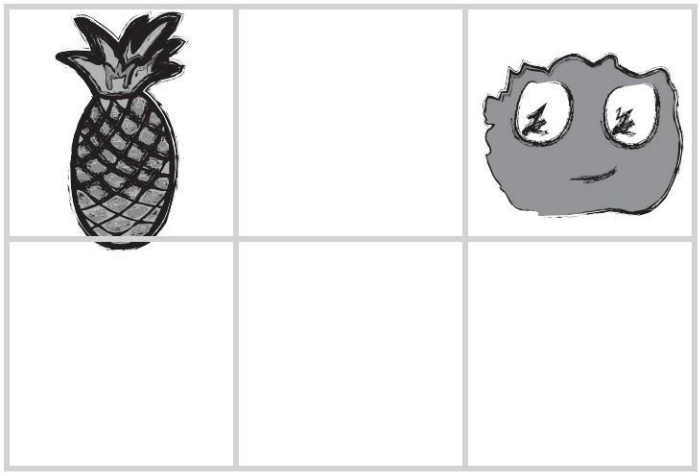
Name(s)_____ Period _____ Date _____

Happy Maps

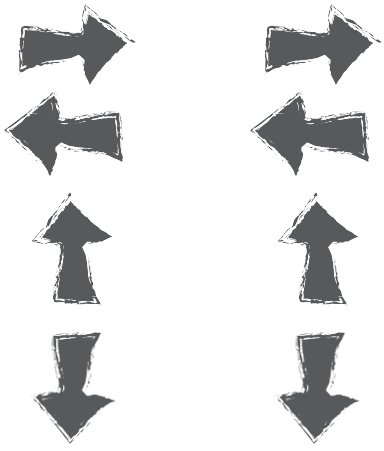


3. Which two ways should the Flurb step to get to the fruit?





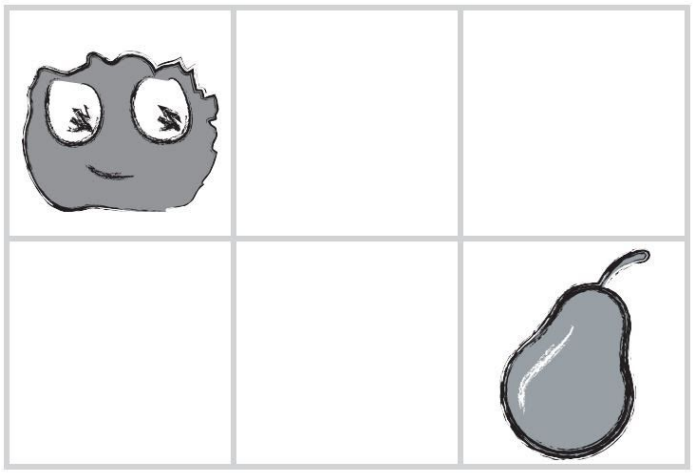
4. Which two ways should the Flurb step to get to the fruit?

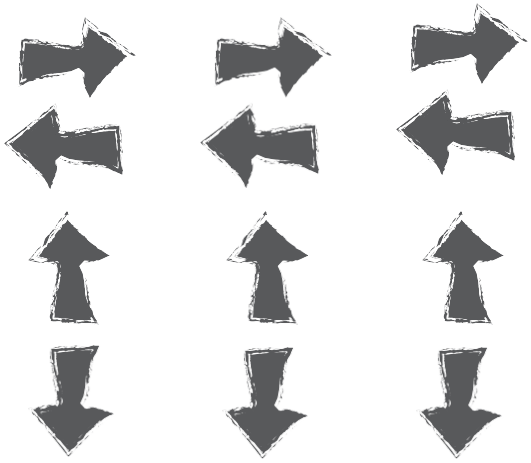


Name(s)_____ Period _____ Date _____

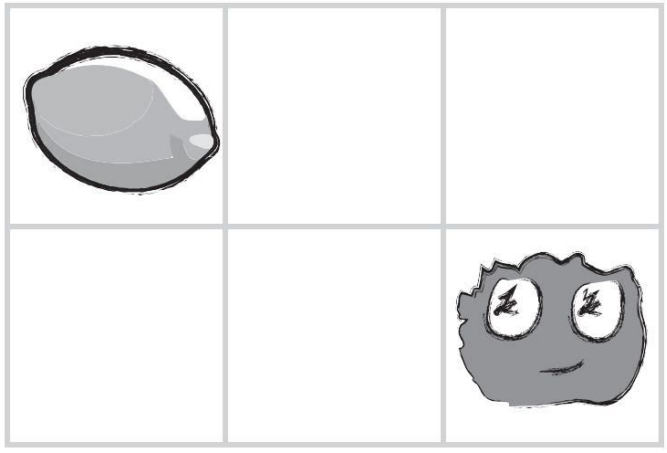
Happy Maps

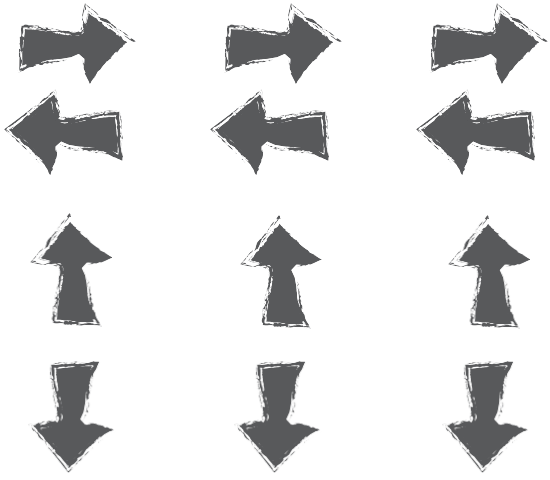
5. What should the Flurb do to get to the fruit?





6. What should the Flurb do to get to the fruit?





Name(s)_____ Period _____ Date _____

Happy Maps

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Activity Card 2: Binary Bracelets & Sequencing (Week 2)

Explore

Welcome to Binary Bracelets & Sequencing! During this week of activities, you will learn that binary is extremely important to the computer world. The majority of computers today store all sorts of information in binary form. Binary is a way of representing information using only two forms. To learn more about Binary, watch this fun video https://studio.code.org/s/course2/stage/14/puzzle/1.

Create

Activity 1: Binary Bracelets – Unplugged Activity

Print and complete the **Binary Bracelets** pdf worksheet. Find the first letter of your first name. Fill in the squares of the bracelet on the bottom of the worksheet to match the pattern of the squares next to the letter that you found. Cut the bracelet out and tape it around your wrist to wear it! You can do this for all letters of your name and have quite a few binary bracelets on your arm!

Activity 2: Collecting Treasure with Laurel

Complete lesson 6, **Collecting Treasure with Laurel.** You can find it here: https://studio.code.org/s/coursec-2019/stage/6/puzzle/1. Be sure to watch the video first then complete the practice puzzles. You will have so much fun collecting all of the gems!

Activity 3: Creating Art with Code

Complete lesson 7, **Creating Art with Code**. You can find it here: https://studio.code.org/s/coursec-2019/stage/7/puzzle/1. Don't forget to watch the video first then complete the practice puzzles. Have fun drawing using code!

Share

Parents ask guiding questions about your child's time on Code.org. Take pictures and post to social media and tag us at #greenmousecafe on Twitter and #greenmouseacademy on Facebook! Below are a few guiding questions:

A. Can you tell me what binary means?
B. What was your favorite activity, Collecting Treasure with Laurel or Creating Art with Code?
C. Can you write or draw a Binary Bracelet for GMA (Green Mouse Academy)? What about for your brother or sister?

Binary Bracelets

Binary Decoder Key

Letter	Binary
A	■□■■ ■■■□
B	■□■■ ■■□■
C	■□■■ ■■□□
D	■□■■ ■□■■
E	■□■■ ■□■□
F	■□■■ ■□□■
G	■□■■ ■□□□
H	■□■■ □■■■
I	■□■■ □■■□
J	■□■■ □■□■
K	■□■■ □■□□
L	■□■■ □□■■
M	■□■■ □□■□

Letter	Binary
N	■□■■ □□□■
O	■□■■ □□□□
P	■□■□ ■■■■
Q	■□■□ ■■■□
R	■□■□ ■■□■
S	■□■□ ■■□□
T	■□■□ ■□■■
U	■□■□ ■□■□
V	■□■□ ■□□■
W	■□■□ ■□□□
X	■□■□ □■■■
Y	■□■□ □■■□
Z	■□■□ □■□■

Find the first letter of your first name.

Fill in the squares of the bracelet below to match the pattern of the squares next to the letter that you found.

Cut the bracelet out and tape it around your wrist to wear it!

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Activity Card 3: Cyberbullying & Loops (Week 3)

Explore

Welcome to Cyberbullying & Loops! During this week of activities, you will learn about Cyberbullying and one way to STOP it. Cyberbullying is doing something on the internet, usually again and again, to make another person feel angry, sad, and scared. This week you will also learn about loops. Loops let you repeat something until a condition is met.

Create

Activity 1: Screen Out the Mean – Unplugged Activity

Print and complete the **Screen Out the Mean** pdf worksheet. Read the prompt and answer the questions. Be sure to check out the STOP rules at the bottom of the worksheet. These rules will help you if you run into any cyberbullying!

Activity 2: Loops with Rey and BB-8

Complete lesson 10, **Loops with Rey and BB-8.** You can find it here: https://studio.code.org/s/coursec-2019/stage/10/puzzle/1 Be sure to watch the video first then complete the practice puzzles. How cool is it that you are creating loops to help BB-8 collect scrap metal? May the force be with you!

Activity 3: Harvesting Crops with Loops

Complete lesson 11, **Harvesting Crops with Loops**. You can find it here: https://studio.code.org/s/coursec-2019/stage/11/puzzle/1 Don't forget to watch the video first then complete the practice puzzles. Crops are ready to be harvested!

Share

Parents ask guiding questions about your child's time on Code.org. Take pictures and post to social media and tag us at #greenmousecafe on Twitter and #greenmouseacademy on Facebook! Below are a few guiding questions:

A. Can you tell me the rules for the word STOP?
B. What was your favorite activity, Loops with Rey and BB-8 or Harvesting Crops with Loops? I know the team here at Green Mouse Academy will for sure say, Loops with Rey and BB-8!
C. Remember…there is always someone else on the other side of the screen. How will you treat others online?

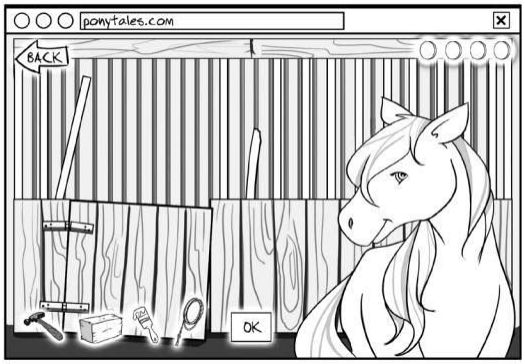
Name(s)_____ Period _____ Date _____

WORKSHEET

Screen Out the Mean

Directions

Jada's parents let her play on a website where she can take care of a pet pony and decorate its stall. Her friend Michael has played with her in the past and knows her username and password.



One day Jada goes to the site to care for her pony. She finds that her pony's stall is a mess and that there are some things missing.

What do you think happened?

How do you think Jada feels?

What should you do if someone starts cyberbullying you?

STOP using the computer until it is safe.

TELL an adult you trust.

Go ONLINE only when a trusted adult says it's OK.

PLAY online only with kids who are nice.

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Activity Card 4: Powerful Passwords & Loops (Week 4)

Explore

Welcome to Powerful Passwords & Loops! During this week of activities, you will learn about the benefits of using passwords and discover strategies for creating and keeping strong, secure passwords. As we use the internet more and more during this time, it's important to start thinking about how to protect private information.

Create

Activity 1: Powerful Passwords – Unplugged Activity

Print and complete the **Powerful Passwords** pdf worksheet. In this lesson, you'll learn about how passwords protect your information, and how to make a good password.

Activity 2: Looking Ahead with Minecraft

Complete lesson 12, **Looking Ahead with Minecraft.** You can find it here: https://studio.code.org/s/coursec-2019/stage/12/puzzle/1 Learn how to create your very own Minecraft world!

Activity 3: Sticker Art with Loops

Complete lesson 13, **Sticker Art with Loops**. You can find it here: https://studio.code.org/s/coursec-2019/stage/13/puzzle/1 Don't forget to watch the video first then complete the practice puzzles. At the end of the course, you are able to make your own stickers.

Share

Parents ask guiding questions about your child's time on Code.org. Take pictures and post to social media and tag us at #greenmousecafe on Twitter and #greenmouseacademy on Facebook! Below are a few guiding questions:

A. Can you tell me one "Do" tip and one "Don't" tip regarding passwords?
B. What was your favorite activity, **Looking Ahead with Minecraft** or **Sticker Art with Loops**?
C. If you would like to continue working on the rest of the lessons in Code.org, click on this link here: https://studio.code.org/s/coursec-2019/stage/15/puzzle/1

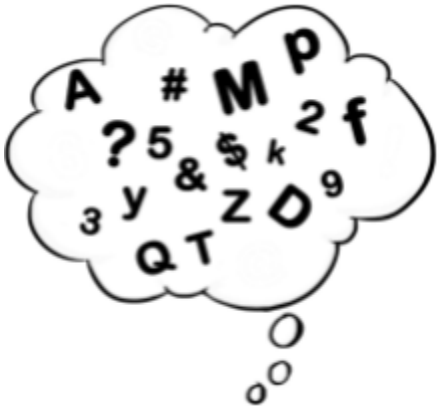
Name(s)_____ Period _____ Date _____

WORKSHEET

Powerful Passwords

Directions

Do you know how to make a powerful password? Write the word DO or DON'T into each of the statements below to show how to make the best passwords.



1. _____ make passwords eight or more characters long.
2. _____ use dictionary words as your password.
3. _____ include letters, numbers, and symbols in your password.
4. _____ change your password at least every six months.
5. _____ use private identity information in your password.
6. _____ use your phone number as your password.
7. _____ use your nickname as your password.
8. _____ give your password to your parent or guardian.
9. _____ share your password with your friends.
10. _____ create a password that you can remember.

Use Common Sense!

It's okay to write down passwords, but …

- Remember not to carry them with you
- Don't tape them on your computer
- Ask a parent or caregiver to help you find a safe place at home to keep them