## **Tech Club**

## **Class 8: Tech Convention**

# The Pet Race

Four children (Jay, Kay, Leon, and Mark) enter their pets (rabbit, frog, turtle, and puppy) into a race. Use the clues below to figure out which child has each pet and what place each pet finished in the race.

|        | Rabbit | Frog | Turtle | Puppy | First | Second   | Third | Fourth |
|--------|--------|------|--------|-------|-------|--|-------|--------|
| Jay    |        |      |        |       |       |  |       |        |
| Kay    |        |      |        |       |       |  |       |        |
| Leon   |        |      |        |       |       |  |       |        |
| Mark   |        |      |        |       |       |  |       |        |
| First  |        |      |        |       | ,     | 1  |       |        |
| Second |        |      |        |       |       | P  | 1     |        |
| Third  |        |      | Ö      |       |       | The state of the s |       |        |

#### CLUES:

Fourth

- 1. Jay's rabbit did not win the race.
- 2. Kay finished right after Jay.
- 3. Leon does not have a frog and did not finish second.
- 4. Mark's pet finished right after the puppy.
- 5. Kay does not own a reptile or amphibian. Her pet finished in 3rd place.





### PROJECT IMPROVEMENT

#### **BACKGROUND:**

During this final class of your group will finish testing your project and complete any necessary improvements. All materials are up for grabs!

# <u>ENGINEER SPOTLIGHT:</u> James Park, Inventor

James Park is a Korean-American entrepreneur who invented the Fitbit using technology inspired by the Nintendo Wii. The Fitbit has become one of the most famous wearable pieces of technology, used to track steps, heart rate, and more. In 2019, Mr. Park sold his company, Fitbit, to Google for \$2.1 billion! Let's improve our inventions today, just like Mr. Park



### **STEPS:**

- 1. With your group, discuss what improvements need to be made on your projects.
- 2. Even if your project worked well in testing, what could you do today to make it even better?

## **TELL ME ABOUT IT**

#### **BACKGROUND:**

An important part of creating something new is sharing your work with others. Many inventors and engineers do this at conferences using research posters. These posters could include information on how the project was made or show how an invention accomplishes a task. Today your group will make a poster and share your projects during a gallery walk, explaining to other groups what you have created and what you learned from the experience.

### **STEPS**:

- 1. With your group, make a poster about your project on the **butcher paper**. Use this sheet to plan.
- 2. What important information do you want to share about your project?

3. Ideas for questions to ask other groups about their projects:

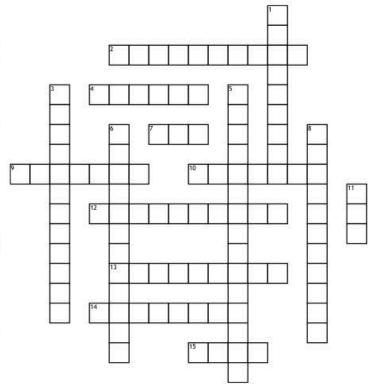
# Digital Technology

#### Across

- 2. external device that provides input and output for the computer (e.g. keyboard, mouse)
- data sent to your computer by a Web server that records your actions on a certain Web site
- 7. memory containing hardwired instructions that the computer uses when it boots up, before the system software loads
- 9. hardware or software that acts as a bridge between two networks so that data can be transferred between a number of computers
- 10. each motherboard has a collection of chips and controllers known as \_\_\_\_\_
- 12. rate at which a processor can complete a processing cycle
- 13. prevent data from being modified or tampered with
- 14. separate two or more parts of a network to control data exchange between each other
- 15. protocol used for sending e-mail over the Internet using a set of commands that authenticate and direct the transfer of electronic mail

#### Down

- code made up of numbers separated by three dots that identifies a particular computer on the Internet
- process of converting data into a secret code for transmission over a public network



- 5. keep information protected from unauthorized disclosure or viewing
- **6.** computer resources must be ready for use by authorized users when needed
- 8. main circuit board of your computer and is also known as the mainboard or logic board
- 11. computer network limited to a small area such as an office building, university, or even a residential home

