

Discovery Lab Description:

Using a cute, clever and codeable Blue-Bot, students will explore the possibilities unleashed by an understanding of the language of computers.

During the Discovery Lab students will be expected to:

- Sit 4 students per table.
- Work cooperatively with one another at the table.
- Follow the hands-on procedures just as the Lab teacher or assistant explains them.
- Handle materials and equipment carefully.
- Wear safety glasses at all times when tools are in use.
- Rotate from one station to the next when given the signal. We will go over this carefully during the class but we find it can be a challenge for some students and it is very helpful to have adults in the room guide students during these transitions.

It is important that teachers and chaperones:

- Help focus the students' attention.
- Assist students with lab activities through questioning allowing the student to do the actual data collection and decision making. For example a parent might ask, "What do you notice when you press that button?"
- Engage students at a higher level by asking open-ended questions throughout the class. For example: "Why did you choose _____?"
- Turn off cell phones and other electronic devices during the activity.

Literary connection:

To get students excited about the upcoming Discovery lesson we suggest reading the following story with your students: *Your Very Own Robot* by R. A. Montgomery.

This book will take your students on a zany adventure with robot Gus. As your students help you choose your adventure, you might find yourself sailing the high seas, soaring into space, and saving Gus from the junkyard! The power of storytelling will be in your students' hands. After building Gus, do you turn him on right away or paint him first? Do you ask your parents for help? What will your friends say if you bring him to school? Although our robots will not be nearly as sophisticated as Gus, we like this book's potential to get kids excited about robotics.

Nevada Academic Content Standards in Science (NGSS):

K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull

