Woodland Hills School District VEX GO Scope and Sequence

In this document you will find:

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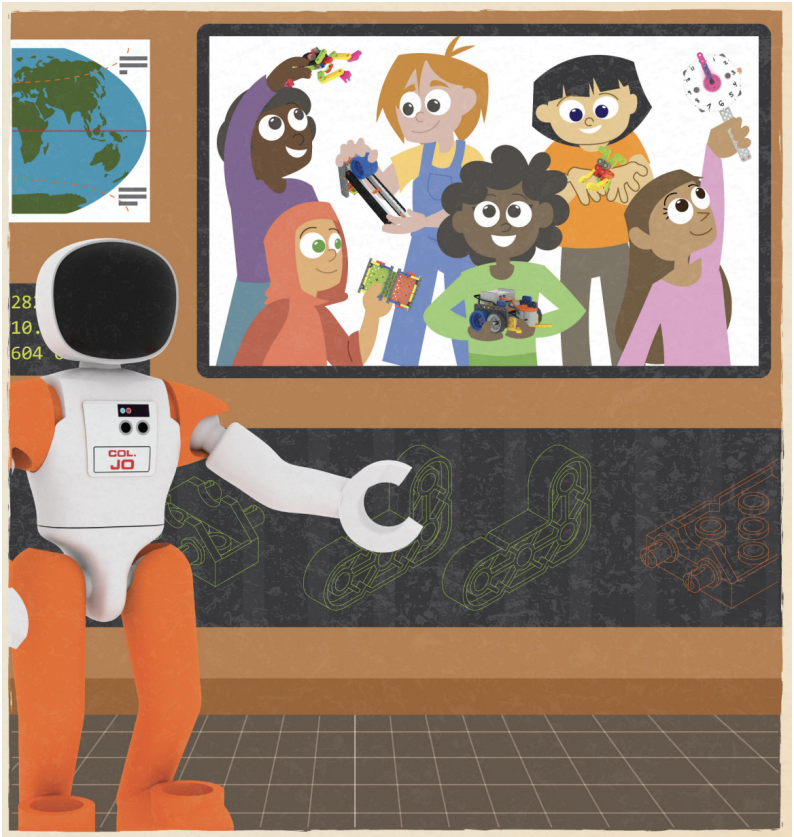

GO Scope and Sequence at a Glance

Week	Lesson/Activity
1	Get Ready, Get VEX, GO PDF Book Get Ready, Get VEX, GO Teacher's Manual
2	GO Activities: GO Scavenger Hunt, Get to Know Go, Rotate It!, Symmetry
3	GO Activities: Architecture, What Is It?, Follow Directions, Pin Out
4	Intro to Building STEM Lab Unit: Lab 1
5	Intro to Building STEM Lab Unit: Lab 2
6	Intro to Building STEM Lab Unit: Lab 3
7	Astronaut Rescue Activity
8	Halloween Free Build - Build a Haunted House 'creature feature'
9	Creature Creation Activity

Choice Board Ideas

Either you or your students would choose a Choice Board extension. These ideas are able to be used with all of the Lessons and activities, but are meant as a jumping off point for you to get started with, and then adapt as needed.

Find a new way	Robot Journal	Build Instructions
What is a different way your group could solve the challenge? Design and/or build a solution to solve the challenge in a new way.	Draw or write a journal entry about 3 things you liked or learned about working with VEX GO in your group today.	Draw or write build instructions to help someone copy your creation. What helpful tips can you include so that they can be successful in their building?
Compare and Contrast	**Tell a Story**	**Level Up**
Compare and contrast your build with another in the class. What is similar or different? What is something you could learn from the other build that you can use in your next creation?	Draw or write a story that tells about what is happening with your build. Your story should have a beginning, middle, and end. You can add a fun twist before the ending too!	Look at the 'Level Up' section on the bottom of the Activity. Choose one to do together with your group.

Week 1 Day by Day

Introduce VEX GO to the class

Day 1	Day 2	Day 3	Day 4	Day 5
Engage: Whole group	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Share:** Whole group
Introduce VEX GO to your students by reading "Get Ready, Get VEX, GO" using the prompts from the Get Ready, Get VEX, GO Teacher's Guide. Build J.O.S.H. together.	Continue the introduction by doing the noticing activity on page 20 of the Get Ready, Get VEX, GO Teacher's Guide.	Complete activities from Keep GOing on page 21 of the Get Ready, Get VEX, GO Teacher's Guide.	Complete activities from Keep GOing on page 21 of the Get Ready, Get VEX, GO Teacher's Guide.	Share artifacts from the week and talk about what you can do to keep your VEX GO Kits organized this year.

Journal/Discussion Prompt Ideas:

- What are 3 things you learned this week about VEX GO?
- What is something you want to try to build with your GO Kit? Why?
- What VEX GO Activity did you most enjoy doing this week?
- What is something you think will help you to be a good group member when you work with VEX GO?

Week 2 Day by Day

Getting to know the Kit components; Spatial Reasoning

Day 1	Day 2	Day 3	Day 4	Day 5
Engage: Whole group	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Share:** Whole group
Review last week's activities, then do the Scavenger Hunt Activity	Go Discovery Activity: Get to Know GO! Activity Extensions: Choice Board ideas above/Journal	Go Discovery Activity: Rotate It! Activity Extensions: Choice Board ideas above/ Journal	Go Discovery Activity: Symmetry Activity Extensions: Choice Board ideas above/ Journal	Discuss what you've learned – Choose pieces of the GO Kit and ask students to describe them in as much detail as possible, using spatial language.

Journal/Discussion Prompt Ideas:

- Why do you think it is important to know about the size and shape of pieces before you start to build?
- What is something you have built with before? How do you think VEX GO will be similar or different?
- What is one thing that you learned about your VEX GO Kit that surprised you? Why?
- What is one thing your group was really good at this week? How can that help you next time?

Teacher Note: For more information about spatial reasoning, see the Spatial Reasoning section in the Unit Overview of any VEX GO STEM Lab.

Week 3 Day by Day

Getting to know the Kit components; Spatial Reasoning

Day 1	Day 2	Day 3	Day 4	Day 5
Engage: Whole group	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Share:** Whole group
Review last week's activities, then do the Architecture Activity. Talk about why planning a project and starting slowly is important to building.	Go Discovery Activity: What Is It? Activity Extensions: Choice Board ideas above/Journal	Go Discovery Activity: Follow Directions Activity Extensions: Choice Board ideas above/Journal	Go Discovery Activity: Pin Out Activity Extensions: Choice Board ideas above/Journal	Share about your projects during the week, and discuss the prompts below.

Journal/Discussion Prompt Ideas:

- How do you think spending time learning about Kit pieces will help us when we start to build?
- What are 3 new things that you learned about your VEX GO Kit this week?
- What is something that will help us work together in our groups?
- Is there anything that you did this week that was not helpful to your group? What did you learn from that?

Week 4 Day by Day

Beginning to build

Day 1	Day 2	Day 3	Day 4	Day 5
Engage: Whole group	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Share:** Whole group
Intro to Building STEM Lab, Lab 1				
Demo/Begin Lab 1, Play Part 1 For an extra challenge this week, have students rebuild J.O.S.H. and add to it.	Complete Lab 1, Play Part 1 Activity Extensions: Choice Board ideas above/Journal	Demo/Begin Lab 1, Play Part 2 Activity Extensions: Choice Board ideas above/Journal	Complete Lab 1, Play Part 2 Activity Extensions: Choice Board ideas above/Journal	Share about your projects during the week, and discuss prompts from the Mid-Play Break and Share sections of the Lab.

Journal/Discussion Prompt Ideas:

- Choose a VEX GO piece from the Kit. Imagine you were describing this piece to someone who could not see colors. Write a detailed description of the piece so they could find it in your Kit.
- Why is it important to take good care of our Kits when we are working with VEX GO?
- How did your group take turns throughout the Activities this week?

Week 5 Day by Day

Beginning to build

Day 1	Day 2	Day 3	Day 4	Day 5
Engage: Whole group	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Share:** Whole group
Intro to Building STEM Lab, Lab 2				
Lab 2 Engage and Demo	Lab 2, Play Part 1 and Mid Play Break Activity Extensions: Choice Board ideas above/Journal	Lab 2 Play Part 2 Activity Extensions: Choice Board ideas above/Journal	Choice Board Activities/Journal *Choice Board Activities can be chosen from the Intro to Building STEM Lab Unit Choice Board or the ideas above*	Share about your projects during the week, and discuss prompts from the Mid-Play Break and Share sections of the Lab.

Journal/Discussion Prompt Ideas:

- What is something you noticed about another group's flagpole build that inspired you or made you think?
- What is something your group figured out about building together that will help you in the future?
- How did the work we did to learn about our Kit pieces help you to build this week?
- How do you think real astronauts might use engineering to help them solve problems in space?

Week 6 Day by Day

Beginning to build

Day 1	Day 2	Day 3	Day 4	Day 5
Engage: Whole group	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Share:** Whole group
Intro to Building STEM Lab, Lab 3				
Lab 3 Engage and Demo	Lab 3, Play Part 1 and Mid Play Break Activity Extensions: Choice Board ideas above/Journal	Lab 3 Play Part 2 Activity Extensions: Choice Board ideas above/Journal	Choice Board Activities/Journal *Choice Board Activities can be chosen from the Intro to Building STEM Lab Unit Choice Board or the ideas above*	Share about your projects during the week, and discuss prompts from the Mid-Play Break and Share sections of the Lab.

Journal/Discussion Prompt Ideas:

- What are 3 things you learned about building with VEX GO through constructing your launch pad?
- Why is it important for the things you build to be balanced and stable?
- What did you find most challenging about bringing your design to life through building? Why?
- If you had to design and build a launch pad again, what would you do differently? What would you do that is the same?

Week 7 Day by Day

Building and iterating to solve a problem

Day 1	Day 2	Day 3	Day 4	Day 5
Engage: Whole group	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Share:** Whole group
Astronaut Rescue Activity				
Introduce the Activity, brainstorm and demo planning and building a solution together.	Plan and sketch your group's solution, then start the build Activity Extensions: Choice Board ideas above/Journal	Continue building and iterating on your solution Activity Extensions: Choice Board ideas above/Journal	Finish building and iterating to create a functional rescue device for Col. Jo. Activity Extensions: Choice Board ideas above/Journal	Share your projects and talk about how each group created their solution. Talk about how their design evolved during the week.

Journal/Discussion Prompt Ideas:

- What is something about another group's rescue device that is different from yours, that you can learn from to help you make yours better?
- What was the most creative rescue device in your class? What makes you think so?
- What is one way that your design and build changed and improved throughout the week?
- If you were to design an astronaut rescue device in space, what are some constraints you think you might have to consider, and how would you solve them?

Week 8 Day by Day

Designing and building a representation

Day 1	Day 2	Day 3	Day 4	Day 5
Engage: Whole group	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Share:** Whole group
Halloween Free Build! Build a feature to add to a haunted house with your VEX GO Kits.				
Introduce the Activity - each group is going to create a creature feature to add to a Haunted House! Brainstorm kinds of things students might want to build (like a ghost, etc.)	Sketch and plan your creature in your group. Match up pieces from your Kit that go with each part of your design.	Construct your haunted house feature from the plan you made yesterday. Iterate on it as needed to make it 'spooky'.	Connect all of the features to a haunted house. Write a story about how your group's feature came to be there. (ie. Who is this ghost? How did it get there?)	Share your spooky stories and your haunted house builds! Celebrate your class construction and share your builds and stories with one another.

Journal/Discussion Prompt Ideas:

- What is something you learned so far this year that helped you with this building challenge?
- What is something you are looking forward to about continuing to build with VEX GO?
- Which VEX GO challenge are you the most proud of? Why?
- What is 1 thing your group has gotten better at this year? How has it helped you to learn and work together?

Week 9 Day by Day

Applying what we've learned

Day 1	Day 2	Day 3	Day 4	Day 5
Engage: Whole group	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Play:** Activities, STEM Labs, Journal, Choice Board	**Share:** Whole group
Creature Creation Activity				
Demo Creature Creation with students - Sketch, plan, and build a creature together. Brainstorm ideas for student creations.	Sketch and plan your creature in your group. Match up pieces from your Kit that go with each part of your design.	Construct your creature from the plan you made yesterday. Activity Extensions: Choice Board ideas above/Journal	Write/draw build instructions for how to build your creature. Test your instructions by swapping them with another group.	Share instructions and have the class build another group's creature. Then show the original. Do they match? Why or why not?

Journal/Discussion Prompt Ideas:

- What was easy about making build instructions? What was challenging? Why?
- Write a story about your creature. Where does it live? What does it do for fun? What kind of personality does it have?
- Describe and design another creature that you think you could build with your VEX GO Kit.
- What is something your group was really good at doing together this week? How did that help you?