

Surfing With Sharks

Khan Academy Lessons for Basic JavaScript Coding

Directions: These are the lessons you should complete <u>in order</u> to successfully create a JavaScript drawing or animation featuring your chosen species of shark.

In order for your work to be saved, you need to Sign Up for a free Khan Academy account using the following link to join Dr. Clark's class (<u>use your Jenison Public Schools account to do so</u>; that way, if you use Khan Academy in a future class, your previous work is saved):

https://www.khanacademy.org/join/FCFKQ2WS

Click on "Join ACT 5th Grade Class." You may need to "Create New Account" if you have not created a Khan Academy account using your Jenison credentials. If you have already created a Khan Academy account using your Jenison email, simply click on "Log in to Existing Account" and enter your information.

PLEASE TRY TO WORK THROUGH SESSION SIX BELOW (which all 15 assignments I have created) TO BE ABLE TO CREATE YOUR SHARK IMAGE. THOSE WHO WANT TO CREATE AN ANIMATION (WHERE YOUR SHARK WILL MOVE) CAN COMPLETE THE REMAINING SESSIONS.

Session One

What is Programming?

Making Drawings with Code

CHALLENGE: Simple Snowman

Session Two

CHALLENGE: Waving Snowman

Coloring with Code

CHALLENGE: Sunny, Snowy Day

Session Three

The Power of Docs

CHALLENGE: What's For Dinner?

Session Four

Intro to Variables

CHALLENGE: Bucktooth Bunny

Session Five

More on Variables

CHALLENGE: Funky Frog

Session Six

Making Animations

CHALLENGE: Exploding Sun

Session Seven

Incrementing Shortcuts

CHALLENGE: Parting Clouds

Session Eight - Be sure you've done Animation before this!

Terrific Text Part One

CHALLENGE: My Favorite Foods

Session Nine - Be sure you've done Animation and Terrific Text before this!

Mouse Interaction

CHALLENGE: <u>Tasty Tomato</u>

Session Ten

You may watch any Coding lesson and try the associated Challenge, then work on your Shark Animation for your website; some possibilities are:

Text Project: <u>Ad Design</u>

Animation Project: <u>Shooting Star</u>

• If Statements with CHALLENGE: Bouncy Ball

• More Mouse Interaction with CHALLENGE: Your First Painting App

Final Project

When you are ready to complete your image or animation of the species of shark you have researched, please do so at the New Program page at Khan Academy. There are many helpful reminders below the coding field, so reference those as needed to refresh yourself on previous learning about JavaScript.

If the link above does not work, copy-and-paste this into your browser: https://www.khanacademy.org/computer-programming/new/pjs

When you are satisfied with your JavaScript, please copy-and-paste your JavaScript code to the submission area in Blackboard. Submit your work when you have finished both your website and your coding.