Factors That Influence Human Migration

Socials Task Card Activity

Coding + Scratch

By Toby Beck

Why coding?

Coding teaches students how to think logically and to problem solve.

Hundreds of thousands of jobs that require logic and coding skills will go unfilled if we do not drastically increase the amount of students who graduate with these skills.

Success in the digital economy requires problem solving, design thinking and coding skills.

(Geography) Students will understand the interactions and relationship between human societies and their physical environment.

Early Modern History: 3.5.e Describe factors that influence locations of human populations and human migration.

Context Story

Why do people migrate?

People migrate for many different reasons. These reasons can be classified as **economic, social, political or environmental**:

- **economic migration** - moving to find work or follow a particular career path
- **social migration** - moving somewhere for a better quality of life or to be closer to family or friends
- **political migration** - moving to escape political persecution or war
- **environmental** causes of migration include natural disasters such as flooding

Some people **choose** to migrate, eg someone who moves to another country to enhance their career opportunities. Some people are **forced** to migrate, eg someone who moves due to war or famine.

A **refugee** is someone who has left their home and does not have a new home to go to. Often refugees do not carry many possessions with them and do not have a clear idea of where they may finally settle.

Context Story

Push and pull factors

Push factors are the reasons why people leave an area. They include:

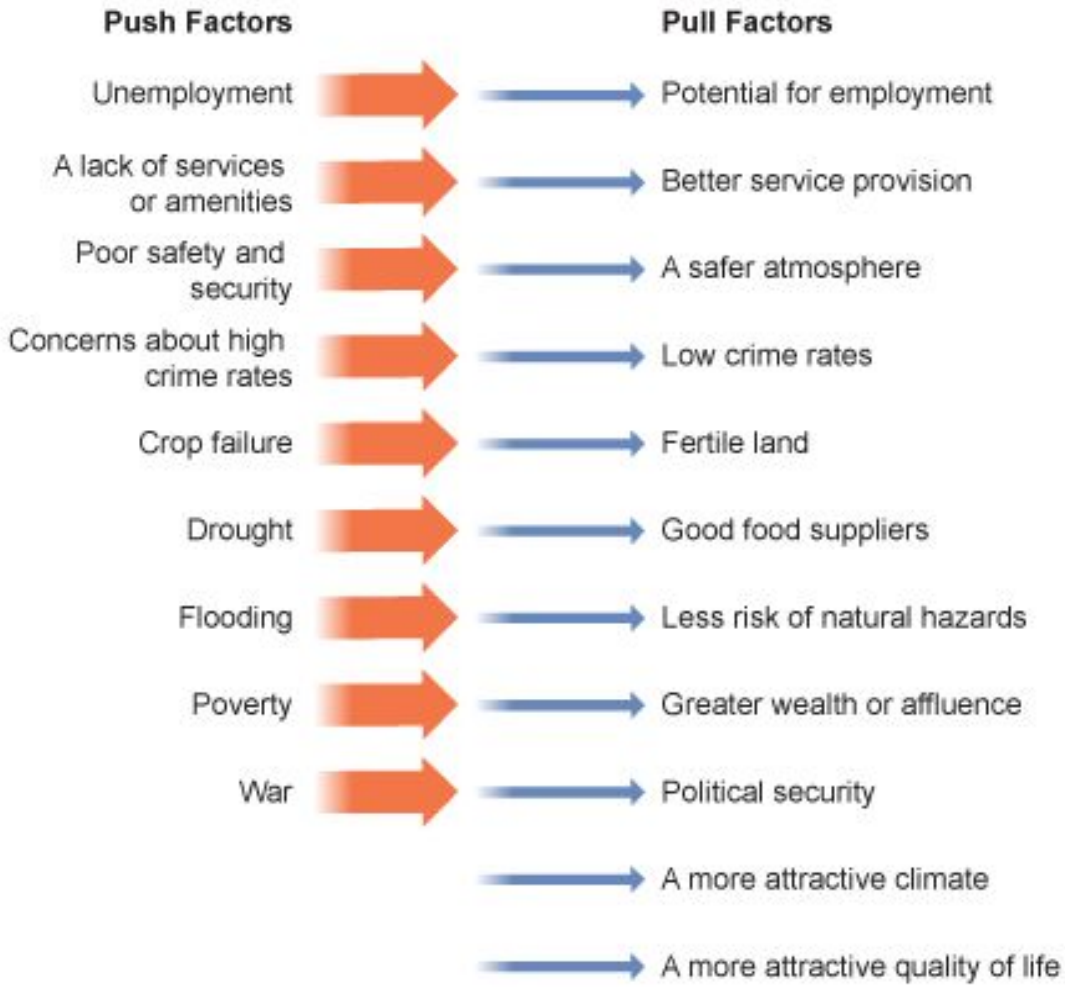
- lack of services
- lack of safety
- high crime
- crop failure
- drought
- flooding
- poverty
- war

Pull factors are the reasons why people move to a particular area. They include:

- higher employment
- more wealth
- better services
- good climate
- safer, less crime
- political stability
- more fertile land
- lower risk from natural hazards

Migration usually happens as a result of a combination of these push and pull factors.

Migration push and pull factors


Push Factors
Pull Factors
Unemployment
Potential for employment
A lack of services or amenities
Better service provision
Poor safety and security
A safer atmosphere
Concerns about high crime rates
Low crime rates
Crop failure
Fertile land
Drought
Good food suppliers
Flooding
Less risk of natural hazards
Poverty
Greater wealth or affluence
War
Political security
A more attractive climate
A more attractive quality of life

Context Story

Why did the Europeans want to leave their homes and undertake the dangerous 3000 mile journey to an unknown life in America? The reasons for the first waves of European Immigration to America were at first based on obtaining profit from the new lands but quickly changed as people decided to move from Europe to escape religious and political prosecution. The prospect of starting a new life and owning some land was also a major reason for the first European immigration to America.

Context Story

History of European Immigration to America: The German Immigrants
German Immigration to America initially centered in Pennsylvania and upstate New York during the 1700's. The early German immigrants were search of religious freedom and the opportunity for trade. The First major wave of German immigration occurred from the 1840's when Germany, like many other European countries, suffered from serious crop failures including the potato blight (1845-1849) and nearly 1 million Germans fled their home country to a new life in America. More German immigrants followed as German farmers were hit by the influx of cheap American wheat and over one million farmers and agricultural laborers left Germany for better farming prospects in the United States. Another great wave of immigration occurred during the Industrialization of America during the late 1800's.

Who Is This Resource For?

You are a teacher who wants to try implementing Design Thinking/Making/Inquiry/Problem Solving/Entrepreneurship into your teaching, but is unsure of how to and wants to start off with a ***coding/Scratch*** resource.

You want to make sure you are teaching the Socials 6 Curriculum while incorporating Design Thinking/Making.

You want support or guidance walking you through how to embed the Design Cycle/Making into the Science Curriculum ***using Scratch/coding***.

Materials/Tools Needed

- Computer
- Internet
- Scratch

AERO Social Studies 6 Learning Outcome

Standard 3: (Geography) Students will understand the interactions between humans and physical environments

3.5.e Describe factors that influence locations of human populations and human migration.

Next Generation Science Standards

MS-ETS 1-1: Define the criteria and constraints of a design problem to ensure a successful solution.

MS-ETS 1-2: Evaluate competing design solutions to determine how well they meet the constraints of the design problem

MS-ETS 1-4: Develop a model for iterative testing to achieve optimal design solution

Common Core E.L.A 6 Science/Technical Subjects

6-8.7: Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

6-8.10: By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.

Teacher Tips

Your students are making an “app” using Scratch while designing a simulation representing a migration from history.

The focus is on students researching examples of migration and learning about why humans migrate from one place to another.

In doing the simulation, students learn about how resources and opportunities draw people to migrate to a new location.

Show students the slides starting with “Design Challenge”. You will likely show one slide per class, however, students may need more than one class for some slides. You determine the pace.

Teacher Tips

Students can always go back and redo a step in the design cycle if necessary. For example, after “Ideating” different ways to solve a problem, students may decide they need to go back to “Define” and change the problem they are solving based on the solutions they came up with in “Ideate”.

From time to time, have students post to their portfolio, by uploading photos and videos and doing a self reflection. This will be part of your formative assessment and should demonstrate student growth over the project.

Teacher Tips

Setting up Scratch accounts: I find it easy to create a class account with my work email and an easy password that all my students will use. This way it is easy to get started on that first class and it is easy to see/retrieve student projects when it’s time to demonstrate to the class.

The downside to this is students will have access to all other students and will be able to get into other students’ projects and make edits.

Teacher Tips

Youtube: there are many tutorials on Youtube for students to learn how to get started coding in Scratch.

Each slide is designed to be a learning prompt for students that class. You are facilitating student questioning and discovery with each slide.

Information for Teacher

I have designed this resource with the intention of minimal preparation for you as well as positioning you the teacher as a guide on the side, facilitating student learning. I hope I have given enough step by step process for you and your students while also allowing for you to be creative with this resource.

Hope you enjoy!

Toby

Information for Students

Copyright and Ethics: It may be useful for you to look at similar projects to get ideas on how you can do something similar. Of course you could just copy and paste someone's project, but...that would be unethical, and you won't learn anything that way. Maybe you set yourself a goal of only looking at someone else's project when you are absolutely stumped on how to do something. Then you are learning from someone else's project to create something unique, different and your own.

You are encouraged to try stuff, make mistakes, learn from your mistakes and learn from your peers to make something that is uniquely your own.

What you will be making

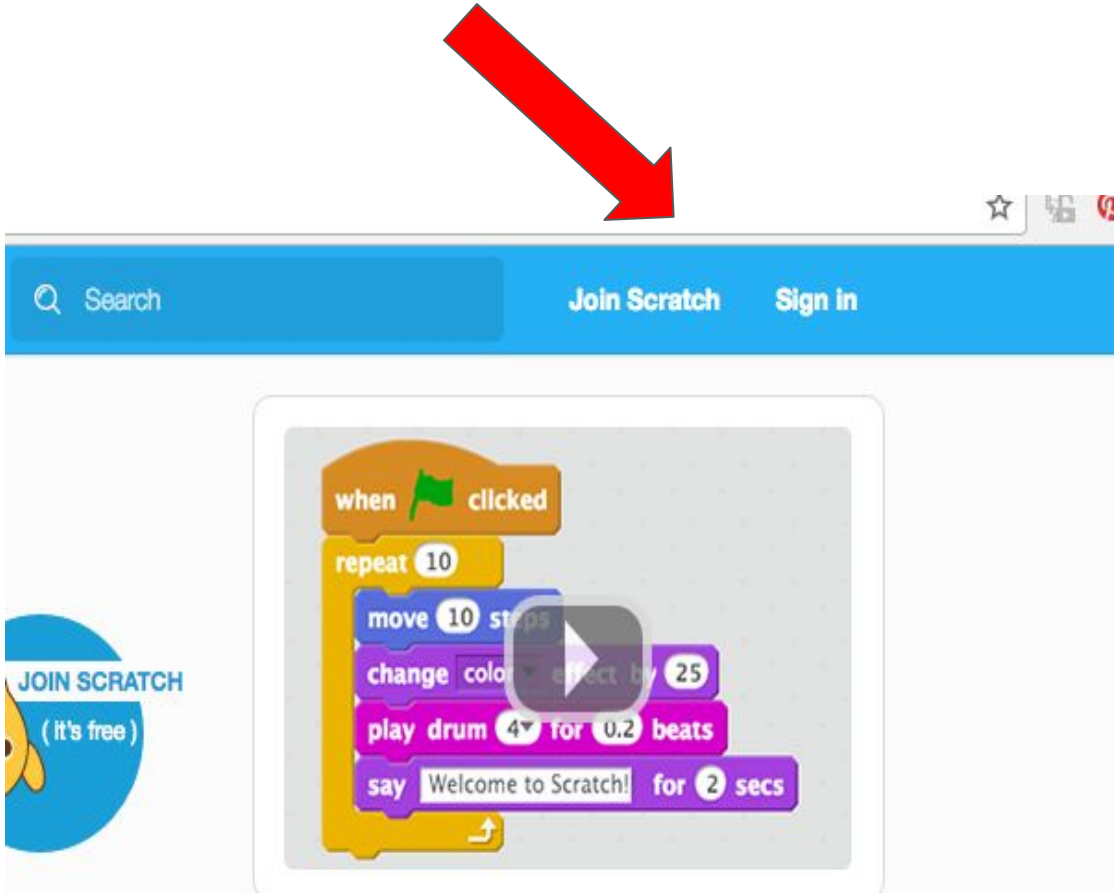
You will be designing an “app” using Scratch that demonstrates how resources and opportunities draw people to migrate from one place to another.

Getting started with Scratch

Creating Account (Class 1)

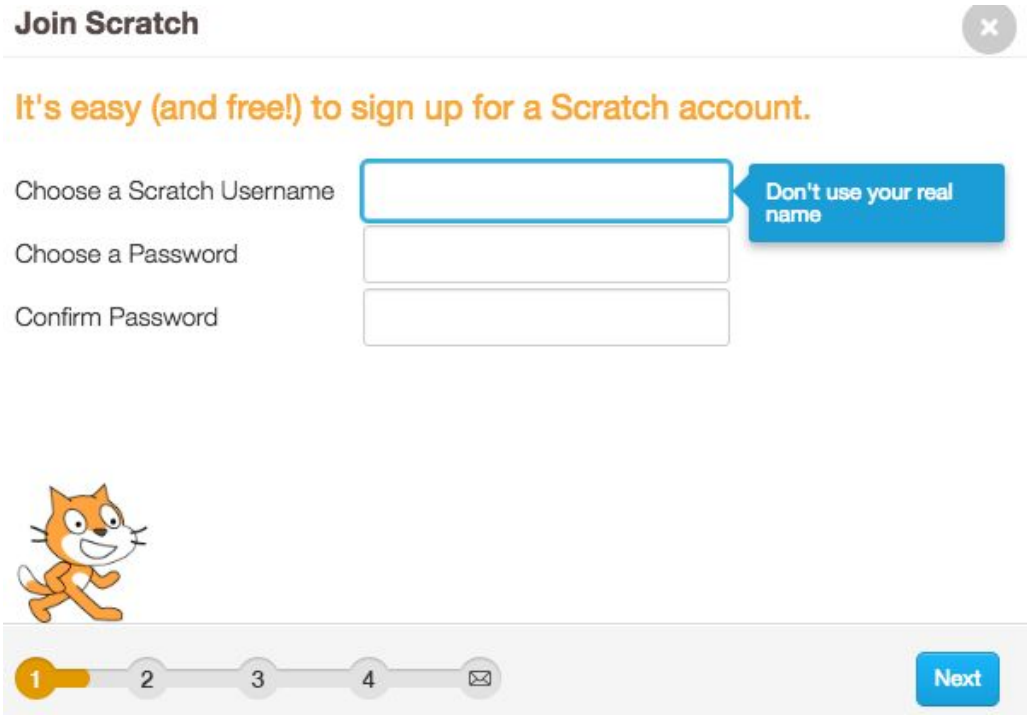
First, you need to set up your Scratch account to start making projects in Scratch.

If you are under 13 years old, you will need to provide your parents email and they will have to confirm your account before you can start making in Scratch



Creating Account (Class 1)

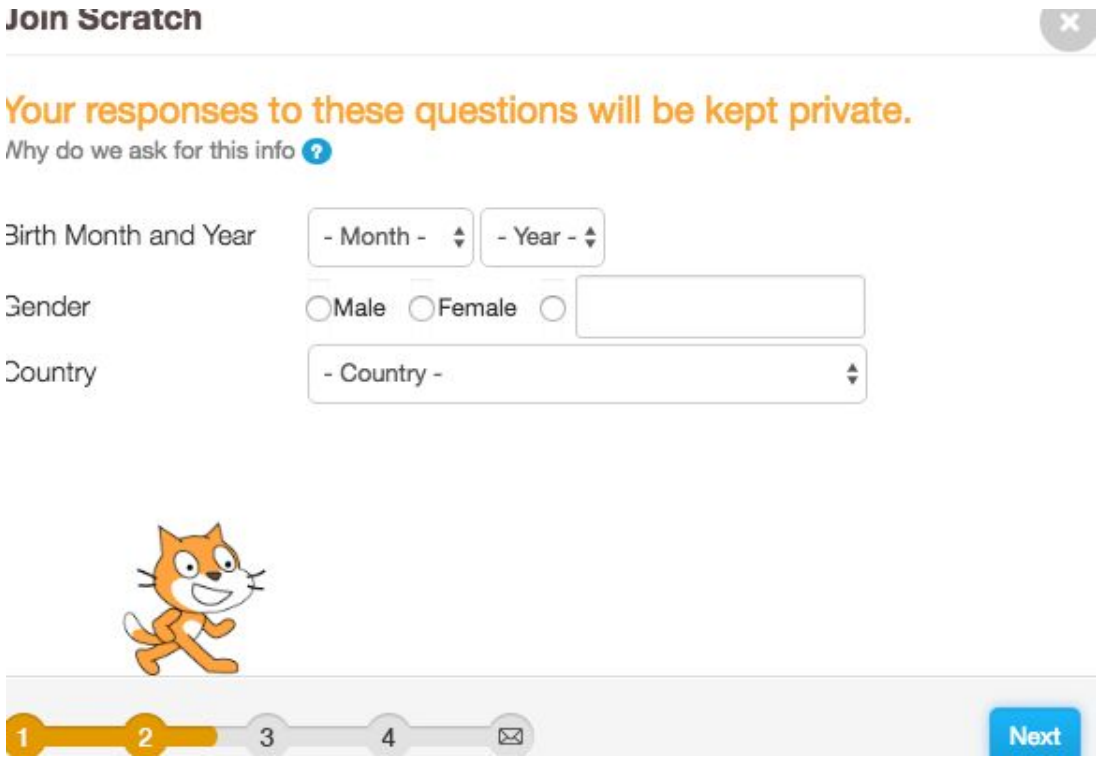
Create your username and password. Your teacher may want to record your account information. This will help your teacher trouble shoot problems for you in the future and allow your teacher to share your work and assess your work.



Creating Account (Class 1)

You must be 13 years old to create your account on your own.

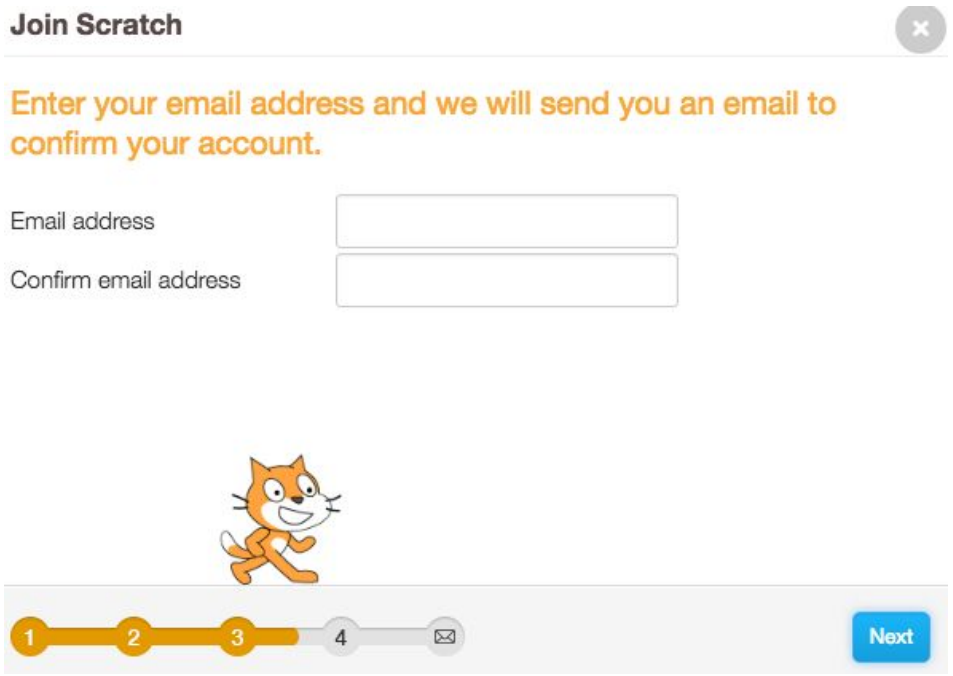
If you are under 13 years of age, you will need to provide your parents' email and they will have to verify your account for you to start making in Scratch



Creating Account (Class 1)

For students under the age of 13.

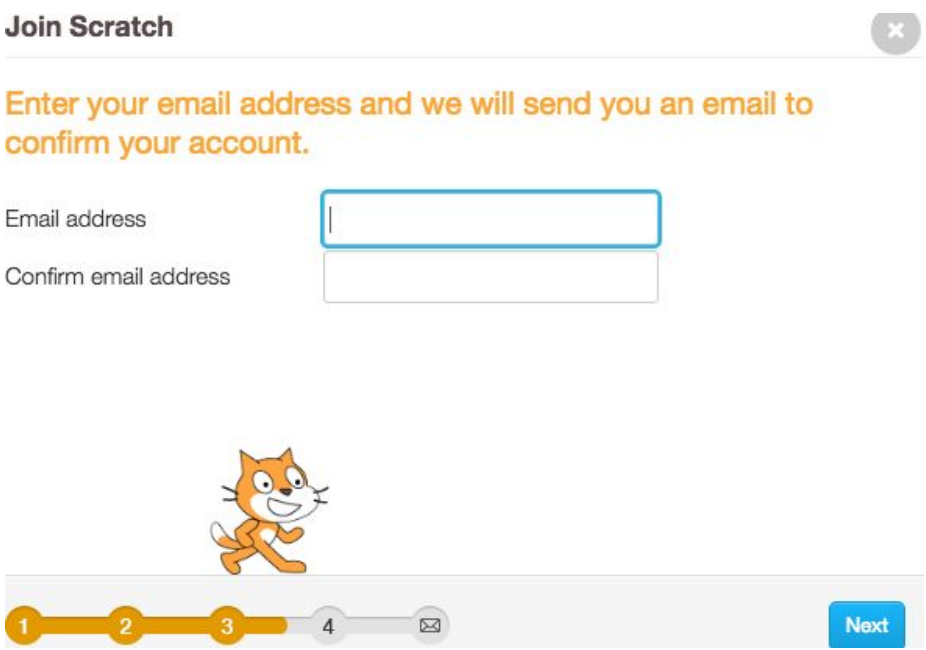
Get your parents to confirm when you are home so that you can start making tonight at home for homework or first thing next class.



Creating Account (Class 1)

For student 13 years old or older.

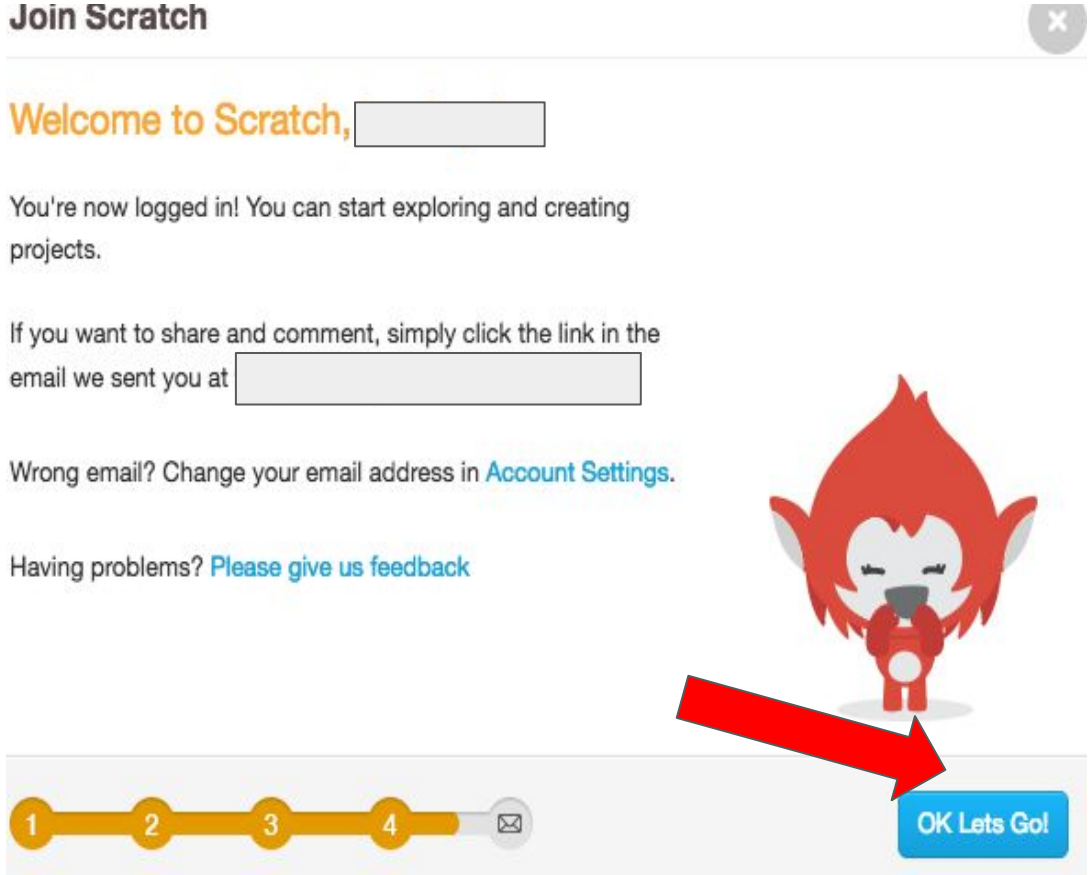
You will need to confirm in your email account.Then you can start making projects and sharing those projects.



Creating Account (Class 1)

You are finished setting up after you confirm in your email account.

Click on “Ok Let’s Go”

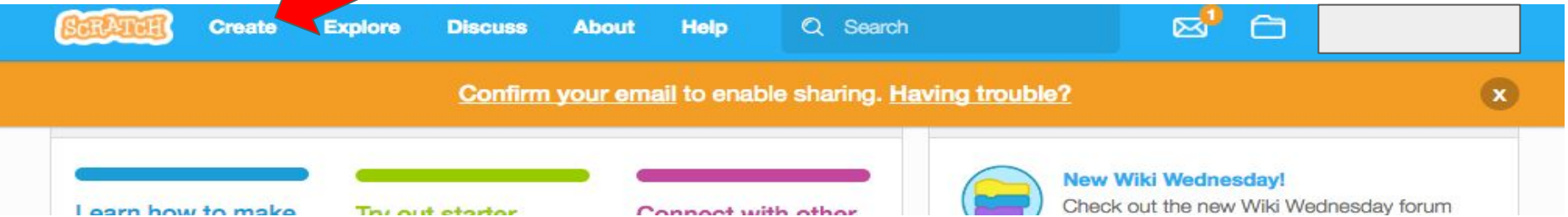


Creating Account (Class 1)

Now you are in your account. Notice the tabs across the top.

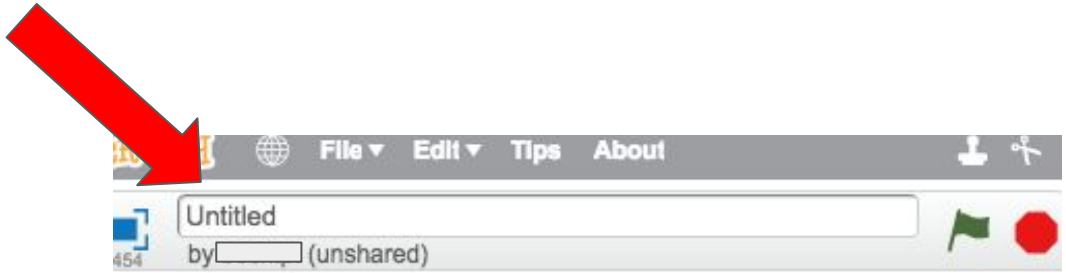
You can click on your account to see your projects. This will be empty right now. You can also personalize your profile.

For now, click “Create” and let’s walk through some “pre-skills” for this project.



Pre-Skills (Class 1)

Click on “Untitled” to name your project. If you don’t, then when you close your project, your work will be lost.



Pre-Skills
(Class 1)

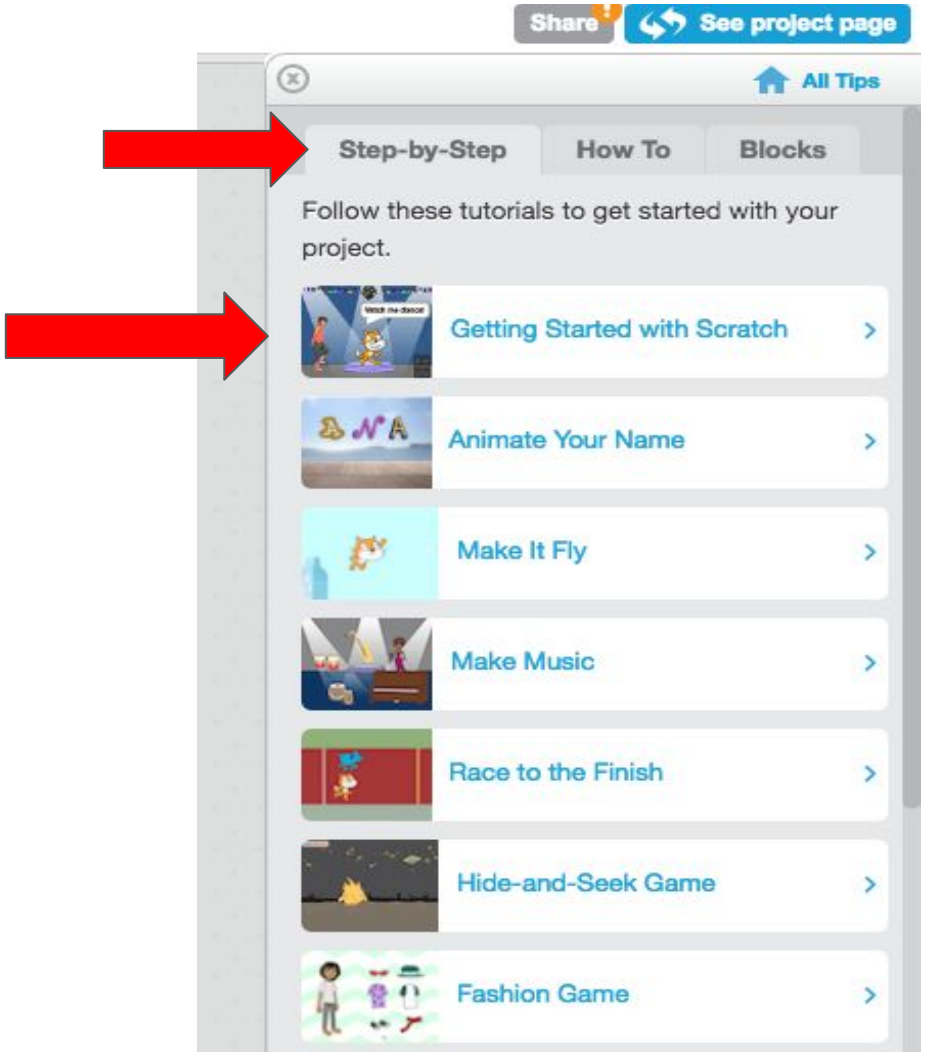
Click on the Question mark in the top right corner. This is the help section that will teach you how to use Scratch step by step.

Pre-Skills (Class 1)

Choose 3 step by step tutorials to follow and complete by the end of the class.

For example, “Getting Started with Scratch” or “Make It Fly” or “Race to the Finish”.

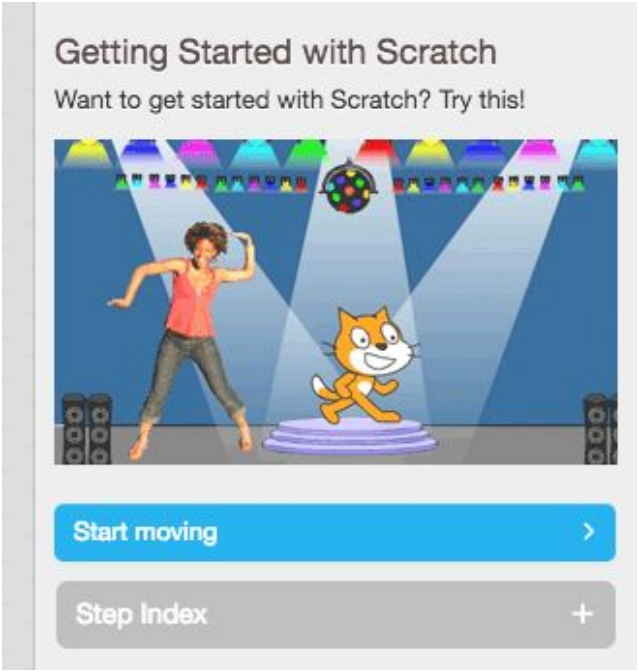
Follow the step by step instructions.



Pre-Skills (Class 1)

For instance, if you click on “Getting Started”, it will look like this.

Click on “Start Moving”.



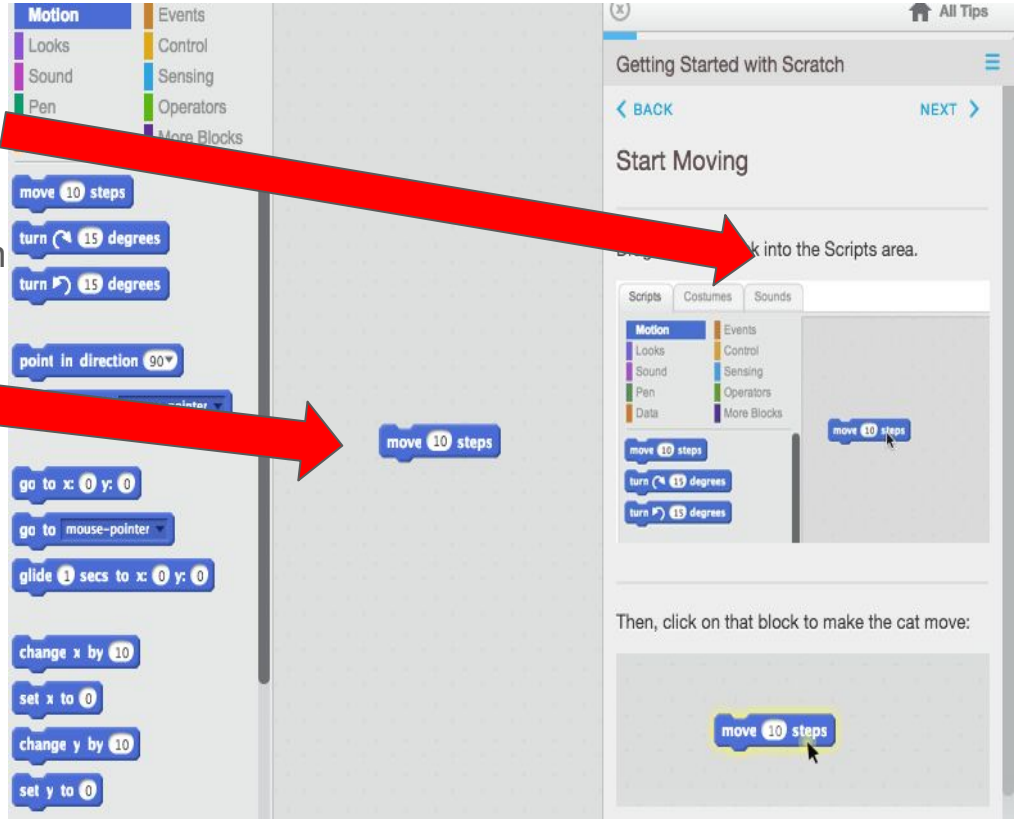
Pre-Skills
(Class 1)

Notice the instructions are on the right side of the screen

You drag a block of code from the code blocks on the left to the middle section where your code is active.

Notice how each code block theme at the top is colour coded. If you click on a different colour coded code theme at the top you will get those code blocks underneath to choose from. This is the dark blue motion theme so we get motion blocks to choose from.

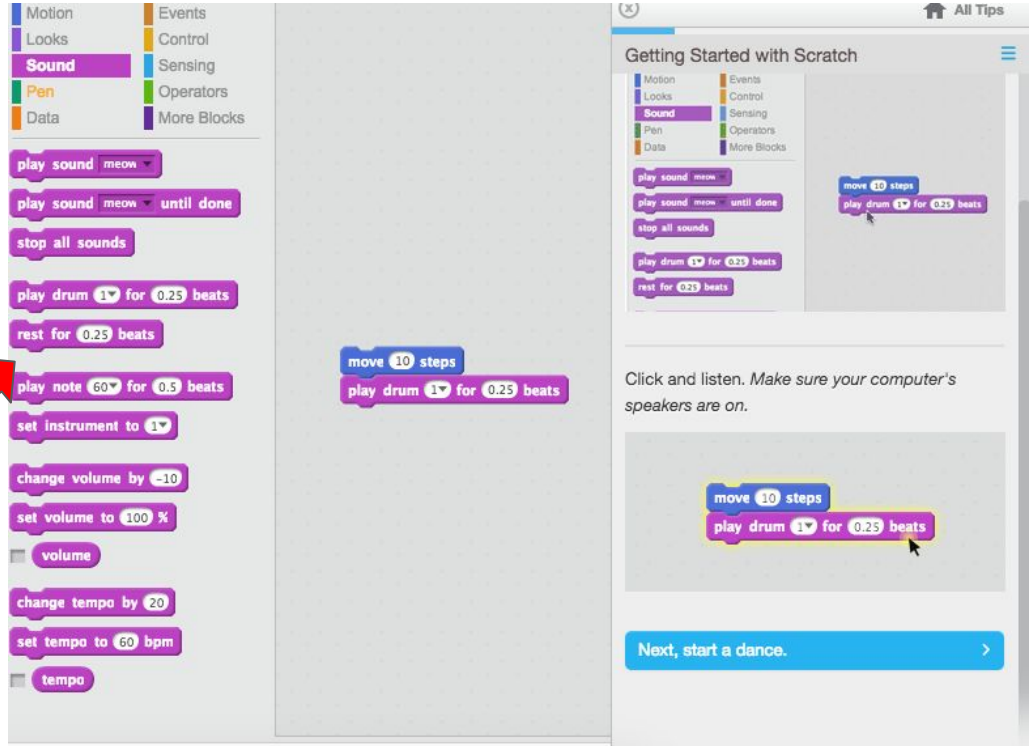
Drag and drop the “move 10 steps” block to the middle section to activate.



Pre-Skills (Class 1)

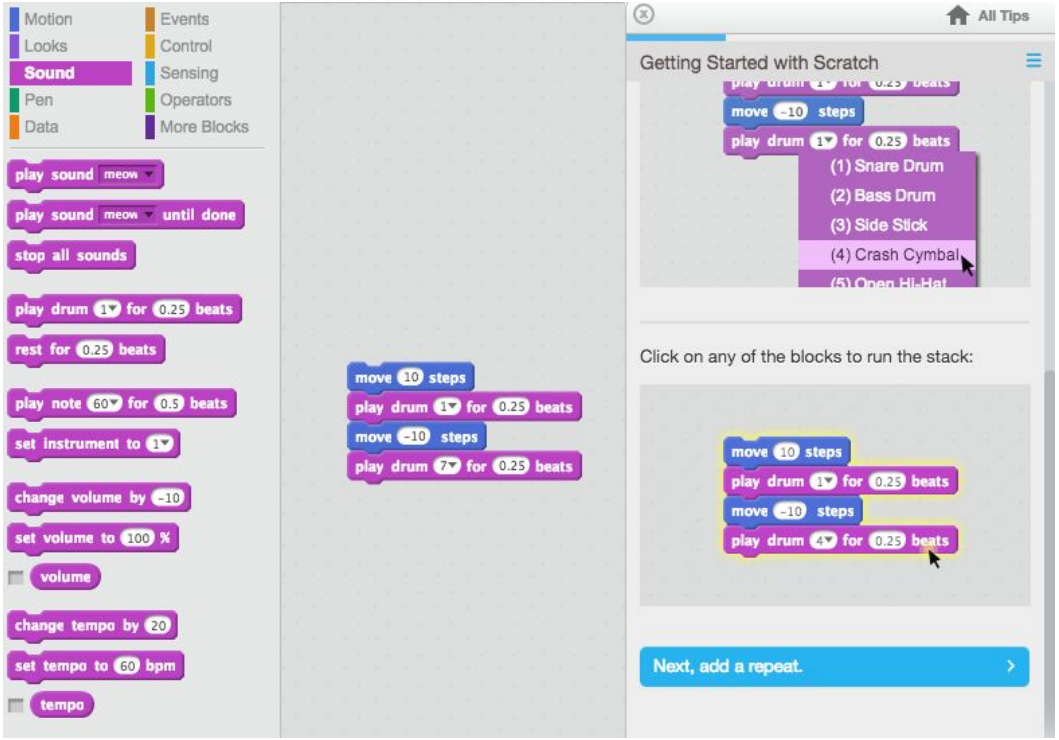
Now, notice how we have chosen the purple sound theme at the top and we have sound blocks to choose from.

Drag and drop the play drum block to the middle section to activate it.



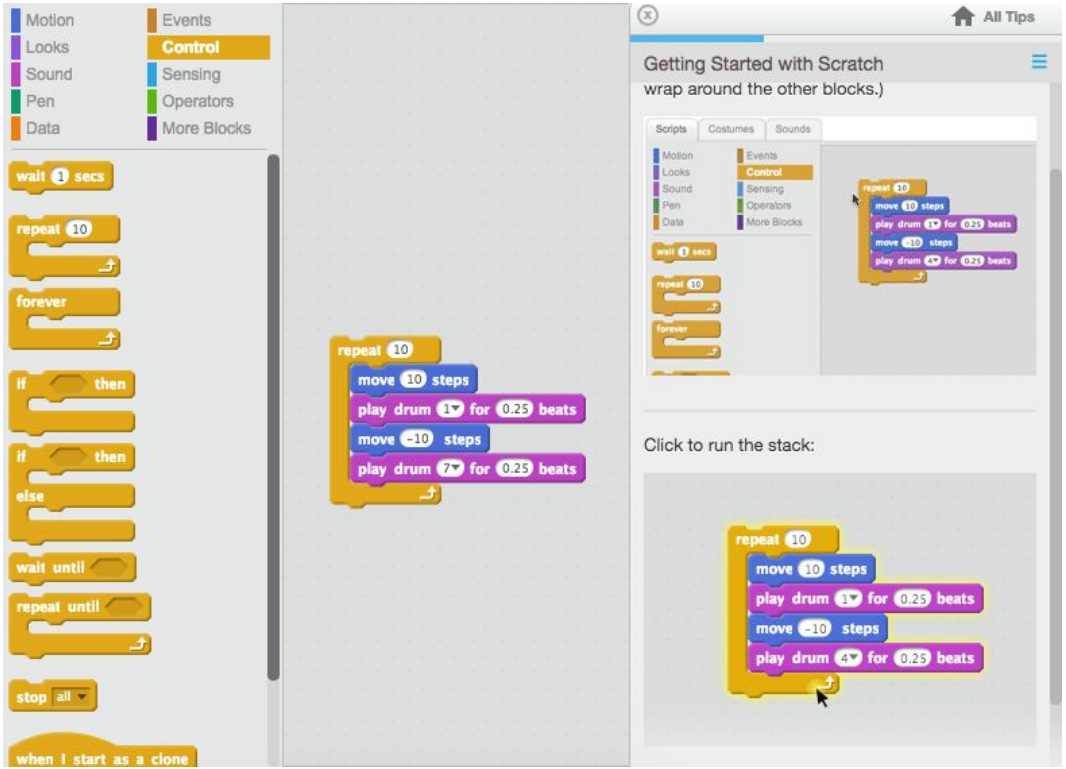
Pre-Skills (Class 1)

Next steps



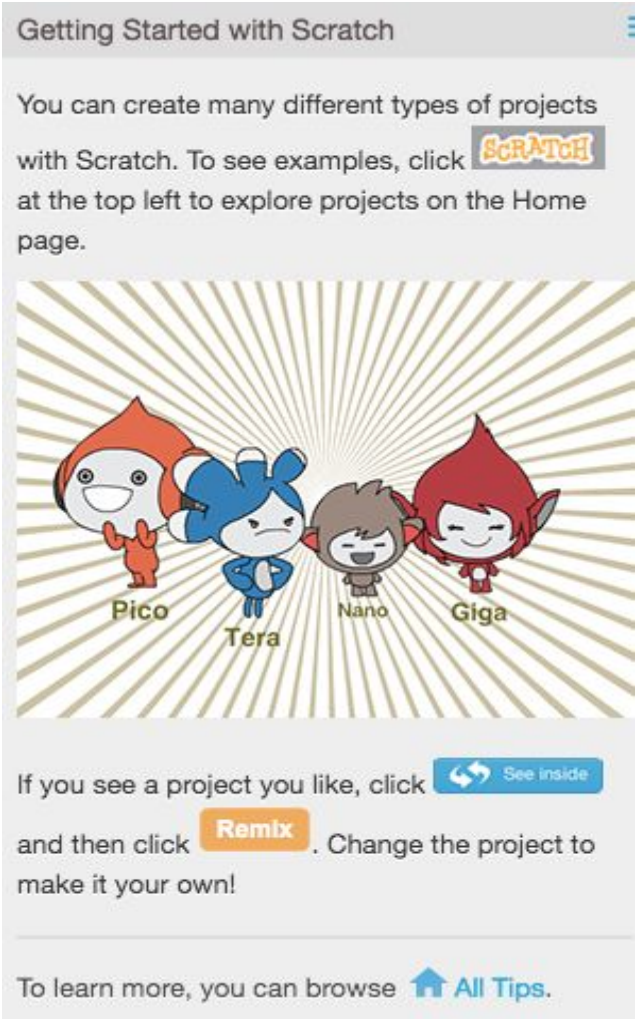
Pre-Skills (Class 1)

Continue following the prompts until you are finished this tutorial.



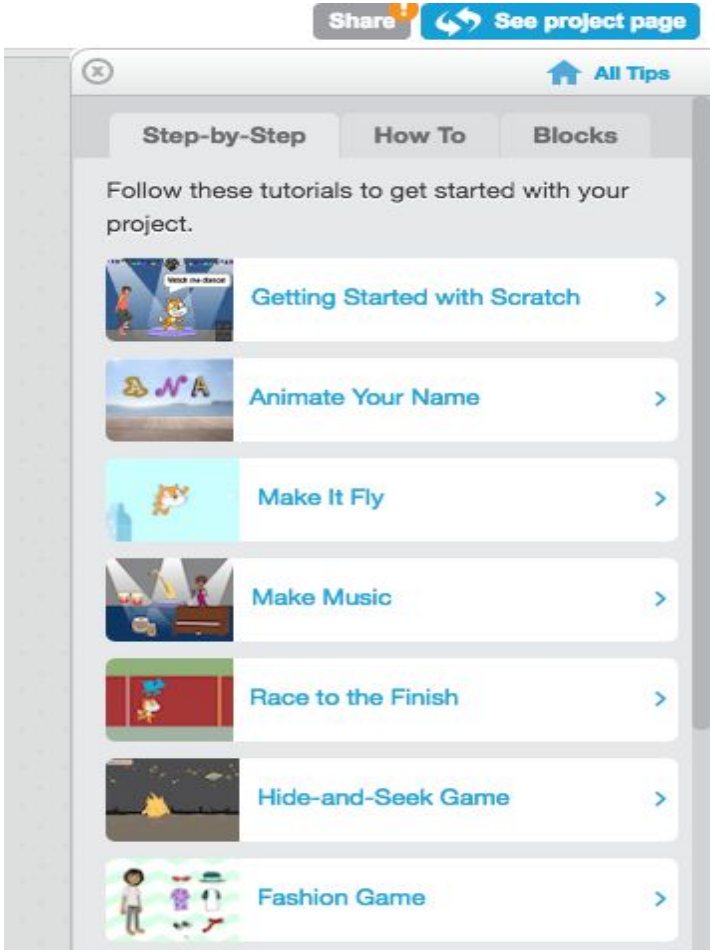
Pre-Skills (Class 1)

You have reached the end of this tutorial. Next class you can complete another two tutorials of your choice.



Pre-Skills (Class 2)

Yesterday, you completed your first step by step tutorial. Complete two more tutorials of your choice.

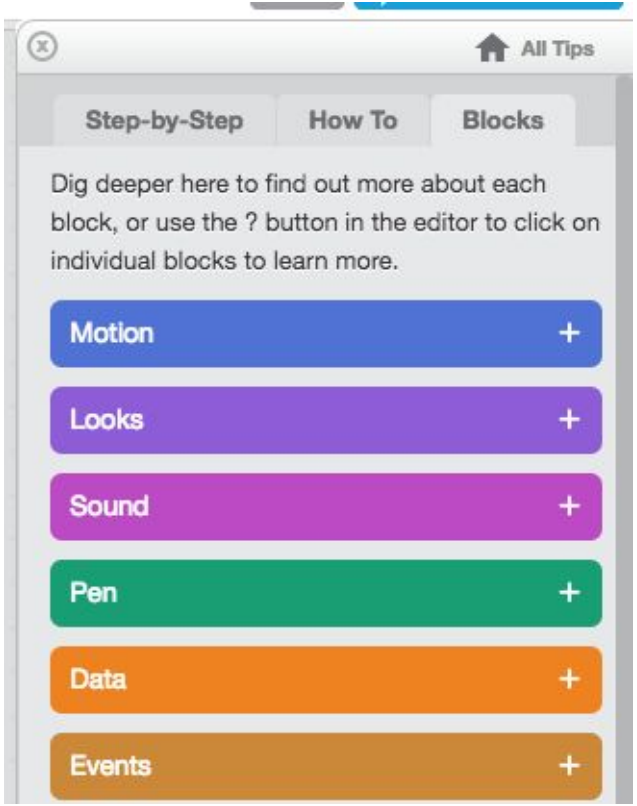


Pre-Skills
Class 3

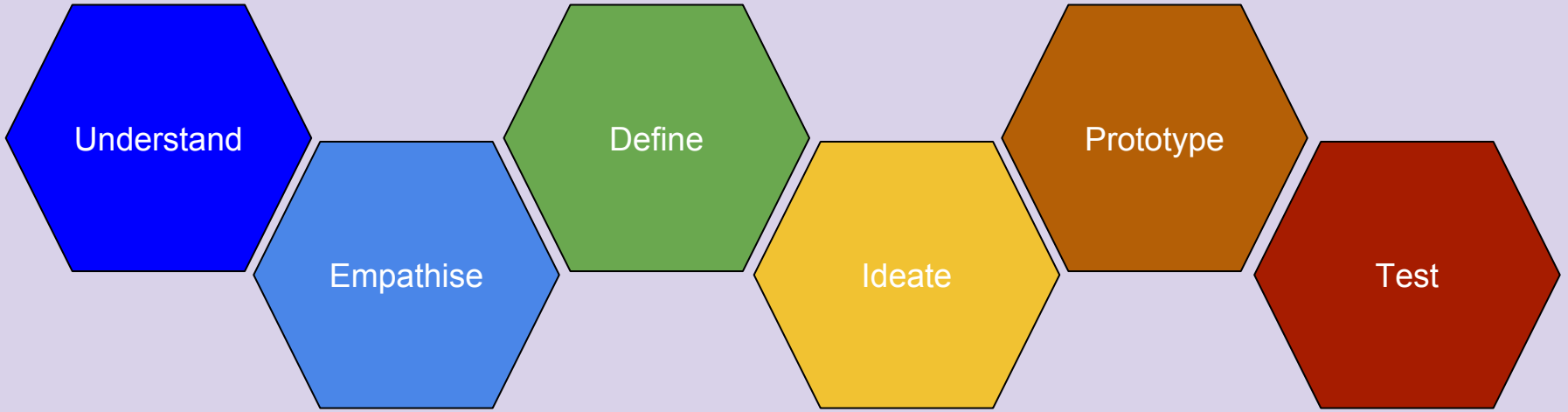
Today your task is to further investigate the following code themes in depth:

- Control
- Events
- Sensing
- Motion
- Data
- Looks

Challenge: can you create one project that incorporates all of the above themes



Projector Slides



Understand the curriculum you are applying to the design challenge

Gain insight into the user's needs and experiences

Define the problem or challenge.

Brainstorm solutions

Choose a solution and create a "beta" prototype

Put your prototype into the hands of users. Get feedback.

The Design Cycle

Design Challenge

How can you use Scratch to demonstrate an example of human migration from some time in history?

How can your simulation demonstrate how resources and opportunities draw people to migrate from one place to another?

Understand

What is migration?Why do people migrate from one place to another?

What are some examples of human migration in history? What were the reasons for these people to migrate to where they did?

What is a resource? Why do people need resources to have a successful life? Why would access to better resources or opportunities influence where a person wants to live?

How do better resources and better opportunities influence human migration? Are some resources more useful than others at different points in history or for different locations in the world?

Understand

What functionality will the user have to migrate?

How will the user migrate from one place to another?

How will you represent the different resources or opportunities found at different places in the world for the user to choose from?

How will the user identify those different resources?

Empathize

Why do people leave where they live in the world to go somewhere else to live in the world?

What risks are involved in migrating to a different place in the world?

Define

What are the things you have to figure out to create your simulation of migration using Scratch?

Ideate

Brainstorm the different ways your simulation can work, or the different ways you can simulate a migration from history using Scratch.

What are the different migrations through history you want to represent with your simulation?

Prototype

Choose the one way you are going to create your simulation and make it. Which migration from which point in history are you going to simulate?

First Test

Put the product into the hands of the user. The user can be you, but can you also get a friend or family member to try it?

Get specific feedback. Ask questions such as:

- How effective is this simulation? Why?
- Does this simulation effectively demonstrate why humans migrate? Why?
- How could the simulation be made better?

Use this feedback to improve your product.

Final Test Day

Put your simulation in the hands of the user again.

Ask yourself:

- Are you satisfied with the user experience?
- Are you satisfied with the final simulation?
- Is your simulation a success? Why?

Rubric (Formative Assessment)

	Beginning	Developing	Meeting	Exceeding
Ideate	Few ideas generated.	Convergent thinking results in limited range of ideas and concepts.	Divergent thinking results in a large, diverse range of ideas and concepts. Selecting a few ideas and concepts to move forward with that represent that diversity.	In addition to “Meeting”, there is an overwhelming amount of ideas ranging from very practical to very difficult (if not impossible) to implement.

Rubric (Formative Assessment)

	Beginning	Developing	Meeting	Exceeding
Prototype	Little or no prototyping accomplished.	Prototyping provides partial solution for a user's needs. Little or no iteration.	Prototyping provides a solution for user needs including a record of the iterations moving from low to high resolution of the prototype describing what was learned from each user test.	In addition to "Meeting", prototypes are tested in a thorough, engaging manner.

Rubric (Summative Assessment)

	Beginning	Developing	Meeting	Exceeding
Factors that influence human migration	Shows limited understanding of factors that influence human migration in their design challenge	Shows some understanding of factors that influence human migration in solving their design challenge	Correctly applies understanding of factors that influence human migration in their design challenge	Applies accurate and deep understanding of factors that influence human migration to effectively solve their design challenge

Design Cycle Printables

The following slides are for you to print out and give to students to guide their learning. Project the Design Cycle slides for students to follow along with.

Design Challenge

Questions

How can you use Scratch to demonstrate an example of human migration from some time in history?

How can your simulation demonstrate how resources and opportunities draw people to migrate from one place to another?

Answers

Understand

Questions

What is migration?Why do people migrate from one place to another?

What are some examples of human migration in history? What were the reasons for these people to migrate to where they did?

What is a resource? Why do people need resources to have a successful life?

What kind of opportunities could a city offer?

Answers

Understand

Questions

Why would access to better resources or opportunities influence where a person wants to live?

How do better resources and better opportunities influence human migration?

Are some resources more useful than others at different points in history or for different locations in the world?

What resources and opportunities are important now, at this point in history?

Empathize

Why do people leave where they live in the world to go somewhere else to live in the world?

What risks are involved in migrating to a different place in the world?

Define

What problem are you solving?

What specifically do you need to focus on to complete your project?

What functionality will your “app” have?

Ideate

Describe at least three different forms your project can take. What are the different versions of your project that might work?

What different pieces of information should you incorporate?

Ideate Blueprint

Idea 1

Idea 2

Idea 3

Description:

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Prototype

Choose the one idea you are going to go forward with that you think is the best. Why do you choose this one?

Make it!

Test

Put the product into the hands of the user.Get specific feedback. Ask questions such as:

- How effective is the functionality of this product?
- Would this product solve the problem it is supposed to?
- How could the product be made better?

Use this feedback to improve your product