

# WorldCraft

ACTIVITY GUIDE



## **Materials List**

MATERIAL DESCRIPTION	<b>QUANTITY</b> (For 20-30 students total 3-4 students per group)
Yarn, cut into 10ft strands	200ft of yarn
Printouts of playing tiles	One set per class
Masking or scotch tape	3-4 rolls per class



## **Before You Start**

#### 1. Download PDFs.

Go to www.kindus.org/worldcraft, and follow the instructions to download all the free PDF files provided.

#### 2. Printing:

Plains PDF: 6 double-sided copies Cow PDF: 1 double-sided copy
Water PDF: 6 double-sided copies Citiy PDF: 4 double-sided copy
Forest PDF: 8 double-sided copies Pollution PDF: 16 double-sided copies

Mountain PDF: 5 double-sided copies

- **3.** You will need to clear an approx. 10'x10' area in the classroom free from obstructions or foot traffic.
- 4. Create a "Vocabulary Wall"

Designate a space on the chalkboard or with chart paper to be the 'Vocabulary Wall." Whenever the youth are introduced to a new word, write it on the vocabulary wall to give participants a visual reminder of its spelling, pronunciation, and definition.







# Introduction to the Game (15 mins)

**WorldCraft** is a game designed to teach students how to sustainably manage their resources, and to be more aware of the impact of their decisions on the environment around them.

Explain to students that today you are going to transform the classroom into an entire world that students can build themselves! Students will form local governments, have to make decisions on where to build their cities and how to supply them with food, and how to manage their waste.

### **Key Concepts**

The following key concepts will help participants understand the value of this game:

**Environment**: The system of plants, animals, and people working together to survive in a given area.

**Sustainability**: Being in balance with the environment around you, meaning you're taking less from the environment than it can make again, or regenerate.

**Regeneration**: The ability of a natural system to replenish what has been lost, and absorb pollution that has been added.

**Pollution**: trash, waste, or toxins put into the air, water, or soil.



# Activity and Procedure: Contruct the 10x10 grid (5 min)

Laying the game grid: Tell students that before we can build cities, we have to build a world, by doing the World Creation Dance!

Get 5 pairs of students to hold 2 pieces of string, one in each hand - just like holding a double-dutch jump rope. Have one partner stand on one side of the room, while the other partner walks their string across the room. Have both partners hold their strings up above their heads, and have a second group of 5 pairs repeat the process underneath. (For larger groups, use more teams with one string each.)

Have all teams lower and tape their strings to the ground, forming a 10x10 grid.

Once grid is placed, the instructor should place an additional string on either side to complete the grid, as well as a divider of different colored string or tape down the middle of each side, creating a plus sign and splitting the board into 4 equal quadrants.





#### **Team Formation**

Using the 4 teams of 5 students created through the grid construction pairings, instruct the 4 teams to claim a quadrant of the board, and name their country.

Once teams have created their country names, go around the room and have the teams announce their team names all together.

#### **Material Managers**

Instruct each team to elect 6 Ministers, who will each have control over the different resources:

- Minister of Food

- Minister of Mountains

- Minister of Pollution

- Minister of Water

- Minister of Plains

- Minister of Forests

#### Create the World!

Instruct teams to lay out their team's 5x5 grid, building a country they'd be proud of! The Ministers of the Lands (Forest, Plains, Mountains, Water) take turns placing their land tiles in their desired locations on the board in these ratios:

- 8 Forests
- 5 Mountains
- 6 Plains
- 6 Water



## Year One!

Now explain to participants the goal of the game: to sustainably build as many cities as possible.

Explain to students that "**sustainable**" means that you're in balance with the world around you, meaning you're taking less from the environment than it can make again, or **regenerate**.

#### **Build Round**

Building cities has a catch! In order to build a city, you must place a pollution tile down on one of each land type (water, plains, forest, mountain).

Players may place pollution tiles anywhere on their section of the board. Building cities impacts the environment!

Tell everyone to place down their city anywhere on they like within their country, and have your Pollution Minister place down one pollution tile on each land type. Then have participants come up with their city names (2 mins).

Ask each team to announce and record the name of their city!





#### **Food Round**

Now you have to feed your city! Explain to participants there are three ways to do this:

- Crops: It takes 2 crop squares to feed a city each turn.
- Fish: Flip one fish square per turn.
- Cow: One cow feeds one city per turn, but also creates a pollution square bordering the cow each turn. Cows can only be placed on Forests or Plains tile.

Have kids decide how they will feed their city, and turn over or place the appropriate tiles and place Pollution Squares as necessary. Have students record their food source on worksheet.

Have the Minister of Food of each team announce how they're feeding their city. Teams can switch the food source of any city at the beginning of each Food Round.

#### **Regeneration Round**

Tell participants that the systems of the Earth have natural ways of **regenerating** themselves, but they can only do it so fast. If we take more from the environment than it can put back, then we run the danger of crashing the system.

(Example to provide: if we take out fish from a lake faster than the fish are being born, then soon enough no one will have any fish to eat!)

Fish Regeneration: Explain to participants that for every 4 fish they have on the board, they get to add, or regenerate, 1 water tile to a fish tile.

Pollution Regeneration: For every 2 unpolluted forest tiles, you may take one pollution tile off your section of the board.

Now the facilitator should clap your hands or ring a bell, and say "I declare the end of Year One!"

Now explain to participants that we'll begin the second round. Follow the instructions again, starting with the "Build Round". Teams can decide if they want to build a second city, and Year 2 begins.





#### **Game Ending**

There are two ways the game can end.

- 1. The facilitator can decide how many rounds or "years" the game will run. You can tell the kids at the beginning that there will be 5 rounds, "and at the end we'll discuss how the game went!"
- 2. The game can end when every nation on the board is being run sustainably, meaning it is generating no more pollution every turn than the environment can sustain.

#### **General Rules**

- Any land or city tile which is polluted cannot be used until its pollution has been removed.
- If you pollute a water tile that has fish on it, it automatically kills the fish, so flip the tile to empty water before placing the pollution tile down.
- You can place as many cities per round as you want or as you have resources for. But keep pollution in mind!



# Hypothesis Zone (15 min)

The goal to this section is to have participants reflect what they learned. Gather the group and ask the following questions. Be sure to chart your answers.

- How does pollution impact the environment? How did it impact your country?
- How did your city's food source affect your success in the game?
- What happened when you ate too many fish?
- What happens when you cut down forests to make more room for cows?
- What did we learn through this game that's also true about the world around us?
- What's something you can do in your life to make it more sustainable?

