

## Prep Instructions

### Part I - Creating the Game Boards

Each group of four or five students should have their own complete game board.

The following items will be required for the prep of this part of the activity:

per group:

- coloured printer paper for game board (3 blue sheets for water squares, 2 green sheets for land squares, 2 white sheets for air squares and Stop! and Speciate squares)
- coloured printer paper for mutation cards (1 blue sheet, 1 green sheet, 1 white sheet)
- template for game board (*Appendix 1*)
- timeline template and 5 sheets of orange (or other brightly coloured) paper
- red tape
- clear tape
- scissors

#### Step 1

Print out one set of game board pieces per group on the coloured printer paper (see *Appendix*).

#### Step 2

Print out mutation cards on the coloured printer paper (see *Appendix*). The mutation cards should be double-sided. Each group of students should have one complete set of mutation cards (**Figure 1**).

Water mutations: blue paper  
Land mutations: green paper  
Sky mutations: white paper



Figure 1

### Step 3

Print out “STOP! and Speciate” cards (see *Appendix*). These cards are double-sided. If the “STOP! and Speciate” cards and the mutation cards are laminated, they can be reused.

### Step 4

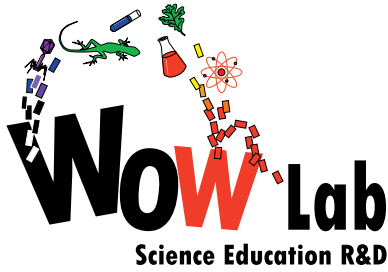
Push several desks together to create one long table. Alternately, push all the desks to the side of the room and use the floor. Place the game board pieces in order (see *Appendix* for instructions). Using clear tape, secure them to the desks or the floor (**Figure 2**). If the game board pieces are laminated, they can be reused year after year.

### Step 5

Tape the timeline beside the game board, with 600 million years (mya) beside the Common Ancestor space. Using red tape, create a border around the Extinction squares (**Figure 2**).



Figure 2



## Part II - Preparing Species-building Materials

The following items will be required for the prep of this part of the activity:

per group:

- 10 shells
- 40 circular sequins
- 30 toothpicks
- 30 square sequins
- 2 sheets of felt or card stock
- 30 pipe cleaners (3 different colours, 10 of each)
- 10 cotton balls
- 10 feathers
- 50 googly eyes
- small plastic containers or paper plates to organize materials

### Step 1

Gather all of the species-building materials. Feel free to create your own mutations or use the WOW Lab examples.

To create:

fins - cut from felt or cardstock  
spikes and beaks - cut from toothpicks  
legs, tails, claws - cut from pipe cleaners  
wings and antennae - cut from pipe cleaners and twist to shape

### Step 2

Divide the materials into piles and place them in small containers or plates at each station. Label each plate or container with the mutations that they represent.

## Water Mutations



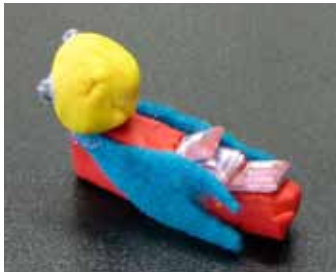
Shell



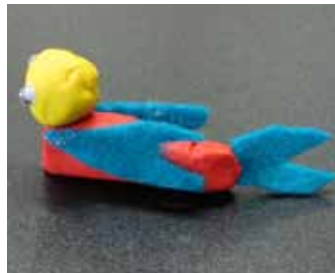
Spots (sequins)



Spikes (tooth picks)



Scales (square sequins)



Caudal Fin (felt)



Extra Pectoral Fins (felt)

Note: the examples are shown as they would appear on the species after they have been built.

## Land Mutations



Tail (pipe cleaner)



Upright (pipe cleaner)



Spots (sequins)



Spikes (tooth picks)



Extra legs (pipe cleaner)



Fur (cotton ball)



Claws (pipe cleaner)

Note: the examples are shown as they would appear on the species after they have been built.

## Air Mutation



Tail (pipe cleaner)



Spots (sequins)



Spikes (tooth picks)



Feathers

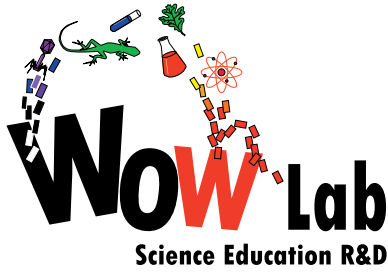


Antennae (pipe cleaner)



Beak (tooth pick)

Note: the examples are shown as they would appear on the species after they have been built.



## Part III - Setting up Game Board Stations

The following items will be required for the prep of this part of the activity:

per group:

- Play-Doh or plasticine (4 jars/bricks: 2 of the same colour and 2 of different colours—for example, 2 red, 1 yellow, 1 blue)
- mutation cards
- die
- white labels and pen
- species building material

### Step 1

Place jars of Play-Doh or bricks of plasticine at each station. Ensure that there are two jars or bricks of one colour, and two jars or bricks of different colours (for example, two bricks of red plasticine, one brick of yellow and one brick of blue).

### Step 2

Place the three piles of mutation cards at each station, face down.

### Step 3

If using conventional dice, take white labels and cover numbers 4, 5 and 6 to ensure that the activity will not end after three rolls of the die. Alternately, create your own die using Styrofoam (cut into a cube) and write numbers 1, 2 and 3 on each side. Place one die at each station.