



YOUTH ART PROJECT FOR:

Ratios

OBJECTIVE

Students will understand ratio and the relationship of two quantities.

Set up/prep time:

30 minutes

Activity Time:

2-3 hours

Materials Needed:

White paper, pencil, eraser, fine point marker, and colored pencils.





COMMON CORE STATE STANDARD

CCSS.Math.Content.6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.”

“For every vote candidate A received, candidate C received nearly three votes.”

PRE LESSON ASSESSMENT

What do the students already know about Ratios?

VOCABULARY

Ratio, Comparison

RELEVANT RESOURCES

Content

<http://www.mathsisfun.com/numbers/ratio.html>

<http://www.basic-mathematics.com/ratios.html>

<http://www.purplemath.com/modules/ratio.htm>

Art

<http://www.youtube.com/watch?v=7XHuyuqSVahA>

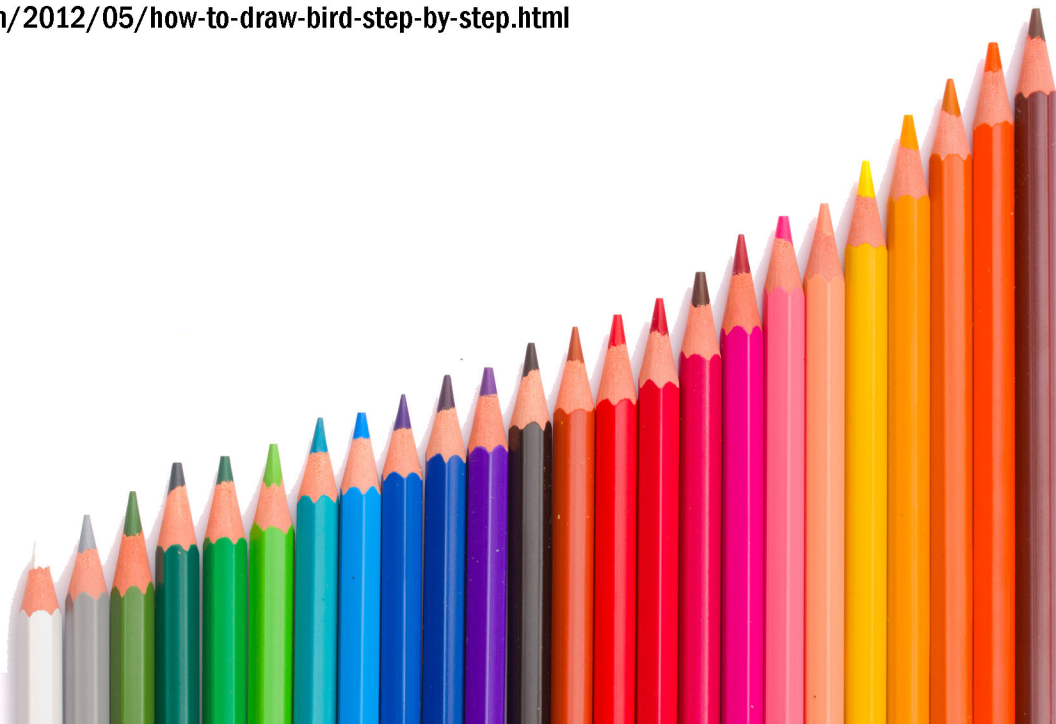
<http://www.wikihow.com/Draw-a-Bird>

<http://darylhobsonartwork.blogspot.com/2012/05/how-to-draw-bird-step-by-step.html>

“The spiral in a snail's shell is the same mathematically as the spiral in the Milky Way galaxy, and it's also the same mathematically as the spirals in our DNA. It's the same ratio that you'll find in very basic music that transcends cultures all over the world.”
-Joseph Gordon-Levitt

Students will engage in:

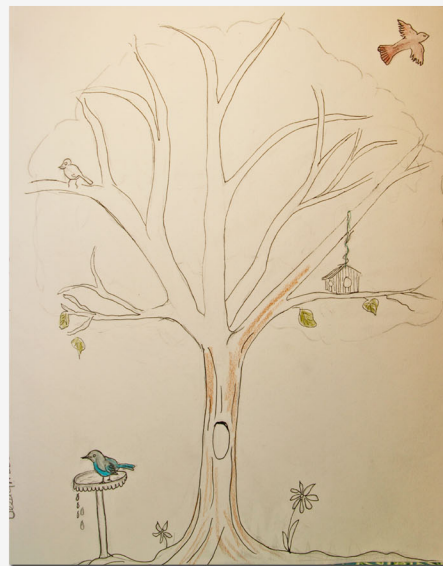
- Listening
- Speaking
- Reading
- Writing
- Partner Work
- Cooperative Learning
- Whole Group Instruction
- Visuals
- Hands on
- Technology Integration
- A Project
- Centers
- Simulations
- Activities





STEP 1

Using a pencil, have students lightly draw the branches of a tree, this is so the birds can have a place to perch. Have the students draw a variety of birds, in the tree, on the ground, and or in the air.



STEP 2

Have the students add whatever they would like to their artwork such as leaves, flowers, bark, insects, or a swing in the tree. After the students are done with their drawing have them trace over their pencil lines with a black fine point pen.



STEP 3

Using colored pencils have the students color their artwork. Then have the students practice the concept of ratios (how many red birds compared to blue birds), how many are flying compared to how many are perched in the tree? Pick one bird and determine the ratio of the length of its beak compared to the length of its wing.



POST LESSON ASSESSMENT

What new knowledge did the students gain?