

What are VR Headsets

VR headsets are special goggles that people wear to make them feel like they are somewhere else. These headsets show 3D pictures that are so realistic that it feels like the person wearing the goggles is in the picture.

VR headsets are used for a lot of different purposes:



Education:

To help students see different time periods in history that they are learning about.



Military Training

To prepare people to fight in war by showing them what it might be like.



Virtual Field Trips:

To allow people to learn about different historic sites without visiting them in person.



Medical Training

To let doctors see surgeries and medical procedures before they perform them.



Cell Biology

To help scientists view tiny cells on a much bigger scale.

Steps to Create a VR Headset

You will create a VR headset that can be used by scientists at a conference. Any scientist will be able to put on a VR headset, choose the organism they want to monitor, then watch how that embryo develops! Scientists can even compare two developments side by side so they can compare embryos to each other! Follow the steps below to create the prototype of your VR Headset.

Step 1: Choosing Embryos

- Your teacher will give you a Handout: Embryonic Development. This handout shows 8 different organisms' embryos. You will need to choose a total of 6 embryos to use in your headset. You will need to pair your 6 embryos into 3 pairs. Each time users click a button on the headset, they will see a different pair and learn about how the embryos are similar and different.

First pair of embryos to compare:

Notes:

Comparative Embryology

Second pair of embryos to compare:

Notes:

Third pair of embryos to compare:

Notes:

Step 2: Creating Images

- You will now create the images that users will see each time they click on a button on the VR headset. Each image should compare two different embryos. Then, write a few sentences about each image. This description will be narrated out loud to the users as they see the image. You can draw the images or cut them out from the handout.

Image Comparison 1:

Draw the image people will see while using your VR headset in this box:



Explain your image in a few sentences below:

Image Comparison 2:

Draw the image people will see while using your VR headset in this box:



Explain your image in a few sentences below:

Image Comparison 3:

Draw the image people will see while using your VR headset in this box:



Explain your image in a few sentences below:

Step 3: Building a Prototype of the Headset

Build a prototype to show what the VR headset will look like.

Requirements:

- Has a strap that will hold the headset on someone's head, like goggles.
- Has 3 buttons on the side that someone can click to change images.
- Is smaller than the size of a shoebox.
- Has a logo on the side that has the name of the VR headset (which you will come up with).



Embryonic Development

The photos below are all images of embryos from different animals.

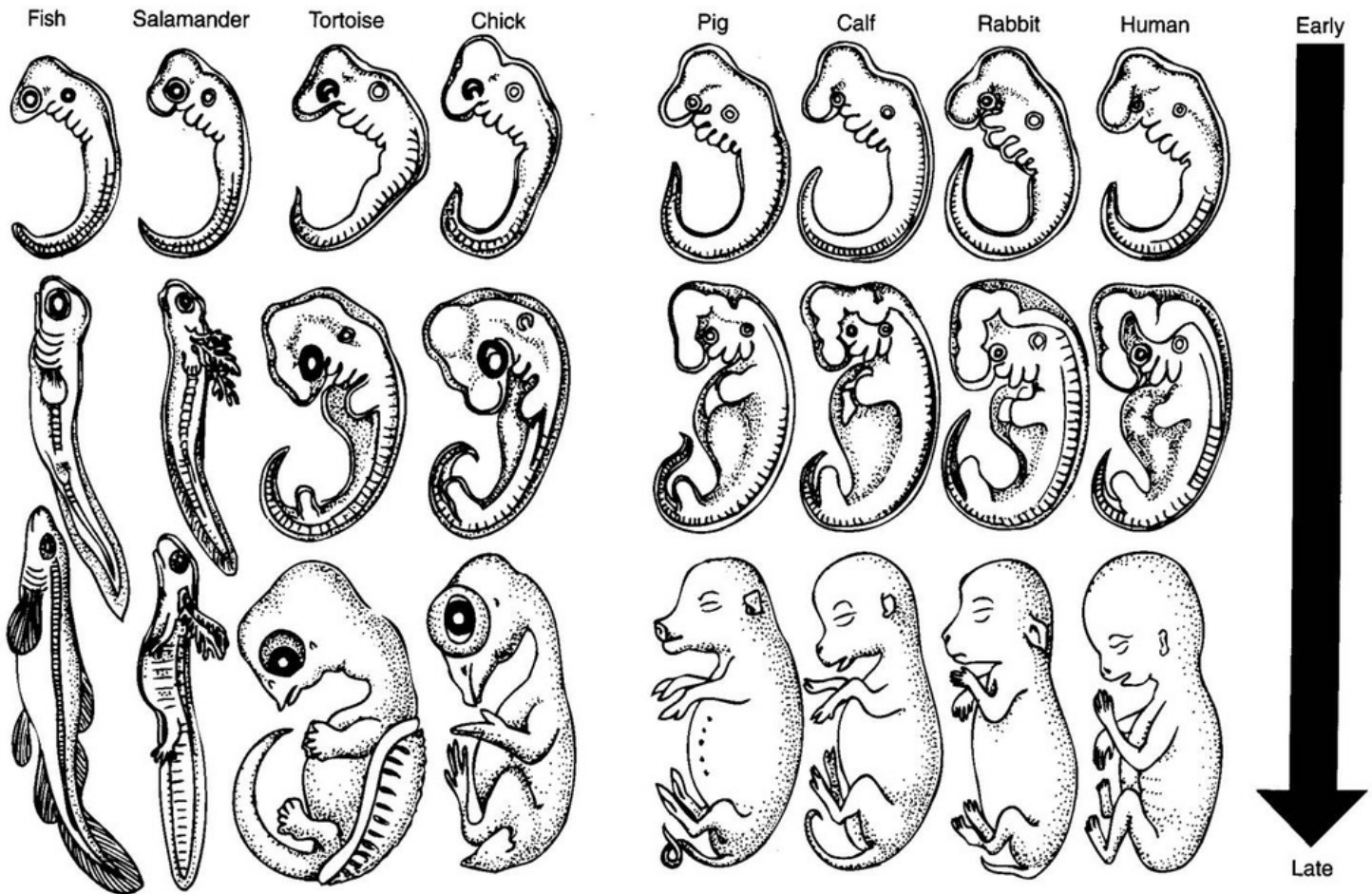


Image courtesy of: Evolutionexplained.com