**Station 1**

The table that follows shows images of different animals at similar stages of embryological development.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Turtle | Bat | Mouse |
| Stage A | creenshot 2017-01-19 20.30.43.png | creenshot 2017-01-19 20.30.43.png | creenshot 2017-01-19 20.30.43.png |
| Stage B | creenshot 2017-01-19 20.32.13.png | creenshot 2017-01-19 20.32.13.png | creenshot 2017-01-19 20.32.13.png |
| Stage C | https://lh5.googleusercontent.com/PUGeohNcu5hM3Ojc_8UsyyWKFH43blx30B52FjcGfjo1IJ3DMHbwrqjnoRnipFO0wDYPtqVeCNuBzfiTHfwRt0D4tfLu6z-HqtQM8UryjfVXPwbzrlTxi8lf-UwdVGcrs6uIE1bX | https://lh4.googleusercontent.com/tJIIS_Dj3kL5yWqasFTaO4i0KUfrNyGTVstEw8yFJLPn5XzYYzJXYXwfx3J-56Dvjp7E5d-EvQ0hjejbQnM_VNdsEUTP84vwHyefytL22wYqM_07hnLlAalC9bh46OKfOtu-v39Z | https://lh5.googleusercontent.com/4QX_6-DapxAECbRDgXAE-_7ORJ7HiVb0yuGLFCVUxLOIr5bHMpVWqEAKzT61Y9dYBxIeyxuq_8EaQUnTSfZQzPCjDhVdD0XfDktRDSParCSv_hWqHK4VLK9lrEWaDIEpmoTqft6sG |
| Stage D | https://lh3.googleusercontent.com/ZxdFazxBum70BiZ5yXNte2kmWnEDt4WKtYktD8Xwh1DjD-xAoPZPAyfGiMHQAk9bFYgDar7vSkbcnKJjlDY3Ho2l9eo2rQfgf1MCUvZo_nksKrvJOe1O5jwAH9CIRdorVnFHT7YK | https://lh5.googleusercontent.com/U5_4GxWoRCxD8QgT39knLzQHcO__YX9RmcocHKgt1IdORGeiES2Su2xNRG3mrSg3093u-S5ybnpTJT5hKXEcRwso4SB_lGQ7e0FTEw_-BfkNiJpkycRstaufcPWQOm4xWAf4qP9_ | https://lh3.googleusercontent.com/B_ed1STr6CgVoVtOj4ihrSv-EefjlQIwyqYcvhA68ulP1izrWTujl3DUeSbaD9687Dl8K6R_e5mjS5Y2TsH_kRhKkFf31H-TtC-JubIzbd7w2Kklf5HnOD7bQcql7nj1aPv2WngSI |
| Stage E | https://lh4.googleusercontent.com/WxQGaIUW9NXZ4wPMrXD6ZKRrdzMQ_4kmcWuc46bzYDilk4I60Wlv9AnSqzSV1B-bBPkDif3ISil2eaEBWynZnJZglKchUkJLvFP0HPTXNH5-SKCyt1-zcvYl0pvoMFYZFF9flmsi | https://lh3.googleusercontent.com/2dpBn9H-FEFz7mu6OwTLP8MXAZzecYURXUI_kfwRrLapIao8dwJz0ST8UseiarYBfwpIyPqZKRZB8Brsqr3LV_YlGfepY2_ohIiKBi3NtE7LS4YowJrB6glDS7iJMk3k6HA-r2cA | https://lh5.googleusercontent.com/ksEktHExVqIDUonRPXhwttxCRJJ_dGr20gkuvMyfb-OAQCAv_GLWoLuDoW3yRZJqfTdeC-lHOVTKMXAVGHVrAKkaas9BytVlYPYm0e1mJf2zm5sW9Cf0qjxv_HCUIuBtaoyW8t_MJ |

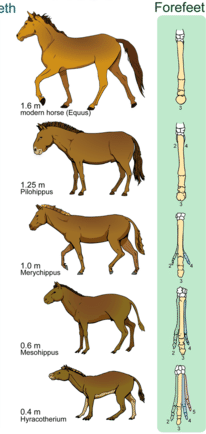
Guiding Questions

1. At what stage(s) do you notice the various organisms begin to develop different parts?
2. Which organisms have the most similar pattern of development?
3. What does this information tell you about how organisms are related?

**Station 2**

The image below shows the modern horse and other similar-looking organisms throughout Earth’s history. The column on the right shows the anatomy of each organism’s front limb.

Most Recent



Oldest

https://www.ck12.org/section/Evidence-for-Evolution-::of::-The-Theory-of-Evolution/

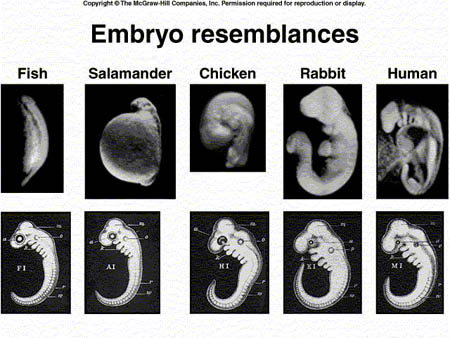
Guiding Questions

1. How many toes do modern horses have? How does this differ from other species in Earth’s history?
2. What trends do you notice about the number and size of toe bones over time?
3. What does this information tell you about how organisms are related?

**Station 3**

The images below show the embryos of different organisms at one stage in development.

A B C D E



http://www.citruscollege.edu/lc/archive/biology/Pages/Chapter17-Rabitoy.aspx

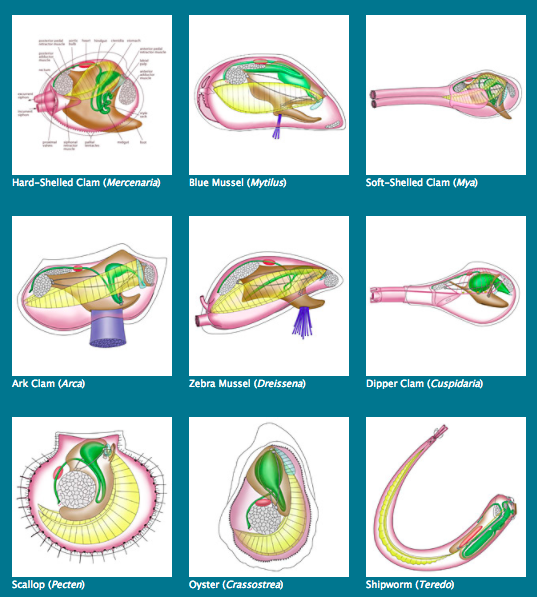
Guiding Questions

1. Which organisms seem to be most similar at this stage of embryological development? Most different?
   1. Turn this paper upside down and look at the key at the bottom of the page. Now that you know what organism is shown in each picture, did any of this surprise you?
2. What does this information tell you about how organisms are related?

A – Fish, B – Salamander, C – Chicken, D – Rabbit, E - Human

**Station 4**

The images below show the anatomical structures of 9 different organisms, which are all known as bivalves. They are color-coded to help you compare structures: digestive systems in green, gills in yellow, foot in brown, muscles and nervous system in gray, heart in red, attaching threads in dark blue, and shell tissue in pink.



http://bivalves.teacherfriendlyguide.org/index.php?option=com\_content&view=article&id=13&Itemid=135

Guiding Questions

1. Which organisms have the most similarity in anatomical structure? Most differences?
2. What does this information tell you about how organisms are related?

**Station 5**

The images below show the anatomical structures of a human arm, a seal forelimb, a bird wing, and a bat wing.

|  |  |
| --- | --- |
| Macintosh HD:Users:laurenstoll:Downloads:ch1f13.jpg | Macintosh HD:Users:laurenstoll:Downloads:download.jpeg |
| Macintosh HD:Users:laurenstoll:Downloads:seal-clipart-cliparti1_seal-clip-art_01.jpg |
| Macintosh HD:Users:laurenstoll:Downloads:Yellow-Bird-ClipArt-GraphicsFairy.jpg |
| Macintosh HD:Users:laurenstoll:Downloads:Clipart-of-bat-free-clipart-design-download.jpg |

<https://www.ncbi.nlm.nih.gov/books/NBK10049/>

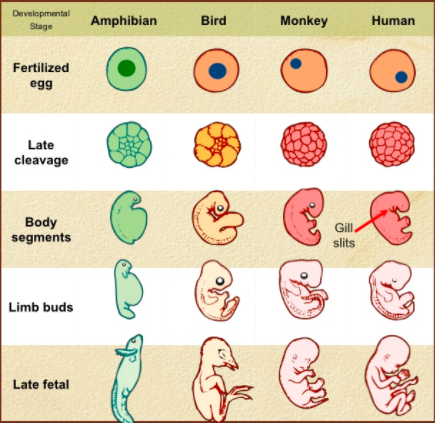
clipart.com

Guiding Questions

1. What similarities and/or differences do you notice in anatomical structure?
2. Do these structures have the same function in all organisms?
   1. If not, hypothesize what caused them to evolve different functions over time?
3. What does this information tell you about how organisms are related?

**Station 6**

The images below show the embryos of different organisms at five different stages of development.



Guiding Questions

1. At what stage(s) do you notice the various organisms begin to develop different parts?
2. Which organisms have the most similar pattern of development?
3. What does this information tell you about how organisms are related?