**Name**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

80% 100%

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| Introduction |
| What drives this movement? |  |
| Swimming Things | /32 /40 |
| Hagfish | Craniates |
| Lamprays | Vertebrate |
| Sharks/Rays | Paired fin, Jaw |
| Ray Finned Fish | Bone |
| Lobe Finned Fish- Fin types | Bone and lobe fins for walking |
| Tiktaalic * Lungs/Neck/Limbs
 | Transition to land (Why)better habitat in shallows Low o2 waterBreath on land |
| Vertebrae & Skeleton | Support/structure/protection & Support/protection/Gravity |
| Jaws | Active Pred/From Gill arches |
|  Amphibians | /24 /30 |
| Amphibians* 4 legs
* 3 chamb. Heart
 | (repro in water, live on land) Deal with gravityPoor separation of Ox/DeOx Blood – effect on life |
| Hylonomus | Tree dweller (amniotic Egg) |
| Reptiles | /24 /30 |
| [Odontochelys](http://en.wikipedia.org/wiki/Odontochelys) | Fossil Turtle – defend from attack from below |
| Amniotic Egg | Role – repro on land, no longer tied to water |
| 3.5 (septum)-cham. heart | Better 02 sep |
| Birds | /24 /30 |
| Archaeopteryx  |  Early bird, evolution of flight  |
| Feathers (structure) | Use/structure |
| Flight (adaptations for flight) | Bone, lungs (air sacs, unidirectional), 4 chambered heart, keel |
| Mammals | /20 /25 |
| Morganucodon |  |
| Milk  |  |
| Hair  |  |
| 4-chambered heart |  |
| Marine Mammals | /20 /25 |
| Why return to water? |  |
| What evidence? |  |
| How do they manage? |  |
| Conclusion | /16 /20 |
| Why do they move from water to land?  |  |
| Is it a cohesive story? |  |

/200