

# Video Time Code Index

Time Code Key: episode:minute:second:frame number

Set VCR counter to "0" at the first frame of video.

Remember that VCR counter accuracy will vary, and not all VCRs indicate frame numbers.

## Episode One: "Origins" (Phylum Porifera)

### Body Plans:

Canals and chambers (fly-through)	01:30:00:25 – 01:33:04:01
Sponge variety	01:18:22:28 – 01:19:42:21
Finger sponge	01:19:53:01 – 01:20:11:23

### Body Parts:

Spicules	01:25:51:16 – 01:27:44:20
Canals and chambers (fly-through)	01:30:00:25 – 01:33:04:01

### Feeding:

Predation	01:36:55:16 – 01:37:41:26
Feeding and dye	01:27:43:01 – 01:31:05:01
Feeding animation	01:31:06:00 – 01:33:04:03

### Habitats/Communities:

Dropoff (vase) sponge	01:16:51:25 – 01:18:23:03
Animation and variety on reef	01:18:23:02 – 01:20:11:23
Symbionts on sponge	01:34:20:04 – 01:36:55:16

### Paleontology/Evolution:

Fossil record	01:38:02:04 – 01:38:42:27
Flagellates	01:13:31:11 – 01:14:02:22
Run time backwards	01:49:20:13 – 01:52:30:01

### Life Cycle/Reproduction:

Spawning and fertilization	01:33:04:23 – 01:34:20:06
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### Anatomy/Zoology:

Tube sponge and globe sponge collecting	01:22:30:15 – 01:23:35:04
Canals and chambers (fly-through)	01:30:00:25 – 01:33:04:01

### Science Process:

Cristina Diaz, Ph.D.	
Collecting sponge samples with Mark Erdmann, Ph.D.	01:20:51:02 – 01:24:54:13
Watching sponges feed	01:27:43:15 – 01:30:57:11
Mitchell L.Sogin	
Extracting DNA from sponges	01:39:49:08 – 01:49:20:12

### Science Careers:

Cristina Diaz, Ph.D.	
Taxonomist free-diving in Indonesia	01:07:12:12 – 01:12:03:14
Search for first animal	01:13:02:25 – 01:15:12:25
Diving for first animal	01:15:12:25 – 01:18:22:29
Sponge structure, collagen, spicules	01:24:54:13 – 01:27:43:16
Mitchell L.Sogin	
In search of the basal animal	01:38:45:14 – 01:39:51:09

## Episode Two: "Life on the Move" (Phylum Cnidaria)

### Body Plans:

Nerve, muscle, movement	02:08:04:15 – 02:12:52:18
Colonialism/coral reef	02:20:50:00 – 02:22:34:28
Polyp becomes medusa	02:30:20:00 – 02:32:30:01

### Body Parts:

Cilia in anemone mouth	02:10:46:02 – 02:11:24:10
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### Feeding:

Nematocysts	02:16:42:29 – 02:17:20:10
Nematocyst discharge	02:19:23:24 – 02:19:35:20
Hydra feeding	02:05:52:06 – 02:08:03:11
Food capture	02:13:48:25 – 02:16:42:00

### Locomotion:

Origin of animal locomotion	02:04:33:00 – 02:05:49:23
Sea star flight response	02:24:03:12 – 02:26:25:24
Jelly movements	02:32:01:03 – 02:37:28:00
Jelly movements and water flow	02:39:16:17 – 02:41:18:23
Other jelly movement	02:41:22:21 – 02:42:32:26
Deep water jellies	02:47:20:20 – 02:50:51:04

### Defense:

<i>Colobonema</i> decoy tactic	02:45:33:13 – 02:45:57:21
Anemone war for space	02:17:19:23 – 02:20:07:25

### Habitats/Communities:

Deep sea jellies/MBARI	02:42:34:13 – 02:50:51:06
Coral reef	02:20:50:00 – 02:22:34:28
New deepwater species	02:48:43:28 – 02:50:05:25

### Paleontology/Evolution:

History, Trembley, Hydra	02:05:17:17 – 02:08:03:08
Sponge to cnidaria	02:08:30:00 – 02:10:39:00
Two body forms of cnidaria	02:30:20:00 – 02:32:30:01

### Life Cycle/Reproduction:

Spawning corals	02:22:35:10 – 02:23:26:21
Moon jelly reproduction	02:33:42:00 – 02:37:28:10

### Anatomy/Zoology:

New deepwater species	02:48:43:28 – 02:50:05:25
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### Science Process:

John (Jack) Costello, Ph.D.	
Motion of moon jelly	02:37:29:04 – 02:42:14:00
Ian Lawn, Ph.D.	
Motivation for research	02:23:42:25 – 02:24:02:28
Investigating anemone nerves	02:26:02:06 – 02:28:41:08

**Science Careers:**

John (Jack) Costello, Ph.D.	
Movement	02:02:00:04 – 02:02:46:02
Roots of animal movement	02:03:37:13 – 02:05:39:11
Animal motion revolution	02:08:04:14 – 02:08:28:19
Beautiful system	02:12:33:07 – 02:12:52:16
Diving for moon jellies	02:32:31:14 – 02:33:40:04
Ian Lawn, Ph.D.	
Movement on rocky coast	02:12:52:18 – 02:14:00:21
What nerves did for animals	02:28:44:05 – 02:30:22:13
Bruce Robison, Ph.D.	
Finding new species	02:42:34:29 – 02:50:51:12

**Episode Three: “The First Hunter”  
(Phylum Platyhelminthes)**

**Body Plans:**

Flatworm animation	03:08:57:15 – 03:10:05:16
Bilateral symmetry	03:10:22:02 – 03:11:16:00

**Body Parts:**

Nervous system and muscles	03:22:55:03 – 03:24:30:17
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**Feeding:**

First hunter	03:11:42:24 – 03:12:17:03
Hunting	03:25:12:04 – 03:29:46:10

**Habitats/Communities:**

Scotland terrestrial flatworm	03:20:08:16 – 03:21:36:10
Parasites	03:29:33:18 – 03:32:17:12

**Paleontology/Evolution:**

Flatworm-like animal fossil tracks	03:04:35:18 – 03:09:13:00
Bilateral symmetry	03:10:22:02 – 03:11:16:00
20,000 species	03:12:17:28 – 03:13:38:18
Planarians	03:22:19:29 – 03:22:58:07
Humans and flatworms	03:42:45:27 – 03:43:23:09
Genetic blueprint and Hox genes	03:42:45:00 – 03:49:13:28

**Life Cycle/Reproduction:**

Reproduction	03:32:54:08 – 03:42:04:11
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**Anatomy/Zoology:**

Tapeworms	03:29:33:18 – 03:32:17:12
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**Genetics:**

Genetic blueprint and Hox genes	03:42:45:00 – 03:49:13:28
Similar genes in different organisms	03:49:13:06 – 03:49:49:11

**Science Process:**

Hugh Jones, Ph.D.	
Worm detective	03:16:05:09 – 03:18:37:21
Hunting the hunter	03:18:37:21 – 03:22:10:05
Matthew Scott, Ph.D.	
Genetic similarities	03:43:08:26 – 03:52:29:23

**Science Careers:**

Whitey Hagadorn, Ph.D.	
On the trail of the first hunter	03:01:59:27 – 03:05:20:11
Intriguing fossil traces	03:06:45:07 – 03:09:12:20
Leslie Newman, Ph.D.	
Finding new flatworms	03:33:40:25 – 03:37:29:01
Matthew Scott, Ph.D.	
Genetic similarities	03:43:08:26 – 03:52:29:23

**Episode Four: “Explosion of Life”  
(Phylum Annelida)**

**Body Plans:**

Cambrian Explosion	04:09:31:17 – 04:12:18:07
<i>Pikaia</i> and body plans	04:19:32:12 – 04:21:34:17
Annelid diversity	04:25:43:29 – 04:32:20:07
Annelid body plan/burrowing	04:40:58:06 – 04:43:53:12

**Body Parts:**

Hydrothermal vent <i>Vestiminiferans</i>	04:28:38:28 – 04:29:58:14
Sabellid in sand	04:29:58:13 – 04:30:31:23
<i>Eudistylia</i>	04:30:33:01 – 04:31:00:10
Terebellid feeding and gills	04:31:01:19 – 04:32:20:07

**Behavior:**

Evolution of behavior	04:21:29:05 – 04:22:08:03
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**Feeding:**

Hydrothermal vent <i>Vestiminiferans</i>	04:28:38:28 – 04:29:58:14
Sabellid in sand	04:29:58:13 – 04:30:31:23
<i>Eudistylia</i>	04:30:33:01 – 04:31:00:10
Terebellid feeding and gills	04:31:01:19 – 04:32:20:07
<i>Diopatra</i>	04:36:43:28 – 04:38:31:14
Leeches	04:32:20:06 – 04:35:03:22

**Locomotion:**

Cambrian Explosion animation	04:09:31:17 – 04:12:18:07
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**Defense:**

<i>Eudistylia</i> eyes	04:30:33:01 – 04:31:00:10
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**Habitats/Communities:**

Annelid diversity	04:25:43:29 – 04:32:20:07
Commensalism (sea star)	04:27:35:26 – 04:28:38:28
Hydrothermal vent <i>Vestiminiferans</i>	04:28:38:28 – 04:29:58:14
Sabellid in sand	04:29:58:13 – 04:30:31:23
<i>Eudistylia</i>	04:30:33:01 – 04:31:00:10
Terebellid feeding and gills	04:31:01:19 – 04:32:20:07
<i>Diopatra</i>	04:36:43:28 – 04:38:31:14

**Paleontology/Evolution:**

Burgess Shale	04:03:57:25 – 04:05:34:19
<i>Anomalocaris</i>	04:06:20:23 – 04:09:33:23
Annelids and climate	04:43:54:16 – 04:50:07:20
Cause of Cambrian Explosion	04:13:38:22 – 04:17:43:13
<i>Aysheaia</i>	04:17:43:12 – 04:18:32:21
Ctenophores	04:18:32:22 – 04:19:32:11

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<i>Pikaia</i> and body plans	04:19:32:12 – 04:21:34:17
Evolution of behavior	04:21:29:05 – 04:22:08:03
Cambrian Explosion (wrap-up)	04:50:07:18 – 04:52:30:03

### Life Cycle/Reproduction:

Leeches	04:32:20:06 – 04:35:03:22
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### Science Process:

Desmond Collins, Ph.D. Fossil puzzle pieces	04:05:34:18 – 04:09:22:22
Damhnait McHugh, Ph.D. Digging up marine worms	04:35:39:01 – 04:40:15:00
Common earthworms	04:45:47:07 – 04:47:17:10

### Science Careers:

Terry Chase Creating animals for museums	04:12:21:03 – 04:14:33:29
Desmond Collins, Ph.D. The Burgess Shale	04:02:00:07 – 04:05:34:19
Damhnait McHugh, Ph.D. Worm watching	04:22:56:01 – 04:27:35:28
Rudy Raff, Ph.D. Exploring animal evolution	04:12:21:03 – 04:14:33:29

## Episode Five: “The Conquerors” (Phylum Arthropoda)

### Body Plans:

Joints, appendages, exoskeleton	05:09:01:24 – 05:10:23:09
Body plan and diversity	05:10:23:04 – 05:11:33:22
Appendage skeleton	05:11:33:22 – 05:12:14:10
Molting	05:12:14:05 – 05:13:34:23
Damselfly metamorphosis	05:34:02:16 – 05:35:02:00
Flight	05:35:01:29 – 05:36:09:16
Insect diversity	05:39:17:23 – 05:40:21:25
Arthropod montage (variety)	05:50:13:11 – 05:50:44:17

### Body Parts:

Joints, appendages, exoskeleton	05:09:01:24 – 05:10:23:09
Appendage skeleton	05:11:33:22 – 05:12:14:10
Appendages animation	05:20:36:16 – 05:21:17:02
Gills and respiration	05:27:24:06 – 05:28:32:05
Spiracles and trachea	05:28:32:04 – 05:29:29:16

### Feeding:

Feeding	05:13:34:26 – 05:15:15:21
Detritivores and carnivores	05:29:30:22 – 05:31:26:17
Dragonfly larva	05:31:46:06 – 05:34:02:18
Adult damselfly	05:34:02:16 – 05:35:02:00
Spider webs	05:38:21:13 – 05:39:17:22
Pollination	05:40:26:25 – 05:41:11:18

### Locomotion:

Appendage skeleton	05:11:33:22 – 05:12:14:10
Appendages animation	05:20:36:16 – 05:21:17:02
Invention of flight	05:37:04:14 – 05:38:20:06

Locomotion, control, skeleton	05:43:19:26 – 05:45:47:22
Arthropod robot	05:46:56:09 – 05:50:13:01

### Paleontology/Evolution:

Fossil evidence and invasion of land	05:04:26:19 – 05:05:52:27
Eurypterids	05:15:46:28 – 05:17:02:16
Transition to land	05:19:19:28 – 05:20:37:01
Algal scum, sea/land bridge	05:21:51:06 – 05:26:02:16
Isopod land invader	05:26:01:11 – 05:26:59:04
Horseshoe crab	05:17:02:16 – 05:19:22:11
Arthropod tracks	05:08:33:24 – 05:09:01:29
Gills and respiration	05:27:24:06 – 05:28:32:05
Detritivores and carnivores	05:29:30:22 – 05:31:26:17
Freshwater invasion	05:31:27:12 – 05:32:04:00
Emergence of flight	05:37:04:15 – 05:38:20:06
Insect diversity	05:39:17:23 – 05:40:21:25
Pollination	05:40:26:25 – 05:41:11:18

### Science Process:

Simon James Braddy, Ph.D. Finding fossil trackways	05:03:14:22 – 05:07:44:07
Robert Full, Ph.D. Brainless walkers	05:43:19:20 – 05:45:47:22

### Science Careers:

Simon James Braddy, Ph.D. Finding fossil trackways	05:03:14:22 – 05:07:44:07
Robert Full, Ph.D. Brainless walkers	05:43:19:20 – 05:45:47:22
William Shear, Ph.D. The first land animals	05:19:22:08 – 05:23:44:28
Micro-fossils	05:23:44:28 – 05:26:01:16
Mark W. Tilden, Ph.D. Arthropod robots	05:45:48:24 – 05:46:35:28
Ed Williams Robotic “crab”	05:46:37:26 – 05:50:13:03

## Episode Six: “Survival Game” (Phylum Mollusca)

### Body Plans:

Molluscan arms race	06:04:39:08 – 06:05:52:03
<i>Loligo</i> (squid) and market squid	06:36:09:04 – 06:38:25:16
Octopus	06:40:22:11 – 06:50:21:10

### Body Parts:

Abalone body parts	06:06:28:00 – 06:07:58:17
Abalone foot	06:17:47:18 – 06:20:44:26
Cockle and moon snail foot fight	06:21:01:23 – 06:23:35:15
Abalone radula and electron micrographs	06:23:35:15 – 06:24:45:19
<i>Loligo</i> (squid) and market squid	06:36:09:04 – 06:38:25:16

### Behavior:

Abalone outrunning enemies	06:17:47:18 – 06:20:44:26
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### Feeding:

Moon snail and cockle	06:21:01:23 – 06:23:35:15
Abalone radula and electron micrographs	06:23:35:15 – 06:24:45:19
Octopus intelligence	06:40:22:11 – 06:50:21:10

### Locomotion:

Abalone foot	06:17:47:18 – 06:20:44:26
Moon snail and cockle	06:21:01:23 – 06:23:35:15
Cephalopod swimming	06:24:45:20 – 06:32:34:03
Nautilus in nature	06:34:28:23 – 06:35:39:05
<i>Loligo</i> (squid) and market squid	06:36:09:04 – 06:38:25:16
Octopus	06:40:22:11 – 06:50:21:10

### Defense:

Shell breaking ( <i>Calliostoma</i> )	06:10:53:14 – 06:11:59:09
Shells and defense;growth	06:11:59:10 – 06:17:16:13
Abalone outrunning enemies	06:17:47:18 – 06:20:44:26
Moon snail and cockle	06:21:01:23 – 06:23:35:15
Squid ink	06:38:03:05 – 06:38:25:16
Octopus intelligence	06:40:22:11 – 06:50:21:10

### Habitats/Communities:

Abalone foot	06:17:47:18 – 06:20:44:26
Market squid	06:36:09:04 – 06:38:25:16
Deepsea squids	06:38:03:14 – 06:39:34:19
Octopus	06:40:22:11 – 06:50:21:10
Moon snail and cockle	06:21:01:23 – 06:23:35:15

### Anatomy/Zoology:

<i>Loligo</i> (squid) and market squid	06:36:09:04 – 06:38:25:16
Octopus chromatophore animation	06:47:12:20 – 06:47:58:27

### Science Process:

Geerat Vermeij, Ph.D.	
Mollusc armor	06:09:04:27 – 06:17:16:13
Peter D. Ward, Ph.D.	
Capturing Nautilus	06:25:11:26 – 06:28:32:14
Diving to Nautilus	06:32:32:25 – 06:35:38:14
Crissy Huffard, M.S.	
Wily octopus	06:39:50:09 – 06:49:10:24

### Science Careers:

Geerat Vermeij, Ph.D.	
Getting a feel for molluscs	06:03:40:26 – 06:05:51:23
Discovering molluscs as a child	06:07:26:23 – 06:09:04:27
Peter D. Ward, Ph.D.	
Capturing Nautilus	06:25:11:26 – 06:28:32:14
Crissy Huffard, M.S.	
Importance of fieldwork	06:39:50:09 – 06:49:10:24

## Episode Seven: “Ultimate Animal” (Phylum Echinodermata)

### Body Plans:

Echinoderm montage	07:12:14:29 – 07:12:54:03
Sea cucumber and pencil urchin	07:08:37:28 – 07:08:52:25

Urchin, sea cucumber, reef urchin	07:09:25:00 – 07:09:44:24
Symmetry, star to urchin to cucumber	07:09:45:10 – 07:11:01:19
Ophiuroids (brittle stars)	07:19:38:02 – 07:21:46:00
Crinoids	07:48:18:11 – 07:49:24:09

### Body Parts:

Internal anatomy, skeleton, nerves	07:11:06:21 – 07:12:16:02
Urchin feeding, tube feet, jaws, spines	07:13:20:21 – 07:16:41:10
Asteroid spines, gills, pedicellariae (pincers)	07:31:49:05 – 07:32:13:24
Sensory tube feet and eyespots	07:33:33:29 – 07:34:30:08
Asteroid predation on mussels	07:34:37:00 – 07:39:20:23
Pedicellariae (pincers)	07:43:58:21 – 07:44:54:26

### Behavior:

Bat star time-lapse	07:27:41:26 – 07:29:57:26
Sea star locomotion, asteroid tube feet and water vascular system	07:31:38:03 – 07:33:45:26

### Feeding:

Urchin grazing and creating barrens, tube feet and jaws	07:13:20:21 – 07:16:41:10
Sea cucumber feeding and locomotion	07:16:43:23 – 07:18:08:23
Ophiuroids (brittle stars) feeding	07:19:38:02 – 07:21:46:00
Asteroid predation on mussels	07:34:37:00 – 07:44:01:01
Pedicellariae (pincers)	07:43:58:21 – 07:44:54:26

### Locomotion:

Urchin grazing and creating barrens, tube feet and jaws	07:13:20:21 – 07:16:41:10
Ophiuroid (brittle star) locomotion	07:19:38:02 – 07:21:46:00
Sea star locomotion, asteroid tube feet and water vascular system	07:31:38:03 – 07:33:45:26
Asteroids seeking prey	07:39:04:15 – 07:44:01:01
Crinoid swimming	07:51:13:05 – 07:51:16:15

### Defense:

Sea cucumber defense	07:18:11:01 – 07:19:36:05
Pedicellariae (pincers)	07:43:58:21 – 07:44:54:26
Urchin grazing and spines	07:13:20:21 – 07:16:41:10

### Habitats/Communities:

Sea cucumber and pencil urchin	07:08:37:28 – 07:08:52:25
Urchin, cucumber, urchin on reef	07:09:25:00 – 07:09:44:24
Urchin grazing and creating barrens	07:13:20:21 – 07:16:41:10
Ophiuroid (brittle star) locomotion	07:19:38:02 – 07:21:46:00
Asteroid predation on pilings	07:34:37:00 – 07:39:20:23

### Paleontology/Evolution:

Symmetry, star to urchin to cucumber	07:09:45:10 – 07:11:01:19
Early evolution, fossils, radial symmetry	07:44:56:15 – 07:50:10:10
Echinoderm radiation	07:49:25:22 – 07:50:39:18
Evolution statement, collage, survival	07:50:39:29 – 07:52:30:02

### Anatomy/Zoology:

Symmetry, star to urchin to cucumber	07:09:45:10 – 07:11:01:19
Internal anatomy, skeleton, nerves	07:11:06:21 – 07:12:16:02

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### Science Process:

Charles H.Baxter	
Echinoderm research	07:29:59:10 – 07:31:37:26
John Pearse, Ph.D.	
“Stars” of the silver screen	07:27:32:18 – 07:29:57:09
Andrew Smith, Ph.D.	
Following a different path	07:45:10:21 – 07:50:38:27
Don Wobber, M.S.	
Time-lapse filming of starfish	07:25:52:04 – 07:27:35:17
“Stars” of the silver screen	07:27:32:18 – 07:29:57:09

### Science Careers:

Charles H.Baxter	
Echinoderm research	07:29:59:10 – 07:31:37:26
Gail Kaaialii, Ph.D.	
Diving for echinoderms	07:06:01:24 – 07:09:44:24
John Pearse, Ph.D.	
Echinoderm research	07:22:51:29 – 07:24:41:03
“Stars” of the silver screen	07:27:32:18 – 07:29:57:09
Andrew Smith, Ph.D.	
Following a different path	07:45:10:21 – 07:50:38:27
Don Wobber, M.S.	
Love of the ocean	07:24:41:25 – 07:25:52:06
“Stars” of the silver screen	07:27:32:18 – 07:29:57:09

## Episode Eight: “Bones, Brains and Brawn” (Phylum Chordata)

### Body Plans:

Amphioxus and vertebral column	08:08:47:00 – 08:09:51:12
Jaws and fish diversity	08:14:12:03 – 08:15:56:10
Tunicate diversity, feeding, evolution	08:15:57:13 – 08:18:23:14
Salps	08:16:32:00 – 08:17:08:00
Larvacean	08:17:08:02 – 08:17:43:20
Fish invasion of land	08:18:24:13 – 08:22:34:14
Snakes	08:28:58:18 – 08:31:04:22
<i>Pikaia</i>	08:08:01:19 – 08:08:46:19

### Body Parts:

Amphioxus	08:05:19:22 – 08:06:31:21
Fish invasion of land	08:18:24:13 – 08:22:34:14

### Feeding:

Jaws and fish diversity	08:14:12:03 – 08:15:56:10
Tunicate diversity, feeding, evolution	08:15:57:13 – 08:18:23:14
First land vertebrates	08:27:05:08 – 08:28:50:29
Snakes	08:28:58:18 – 08:31:04:22
Anaconda	08:31:15:25 – 08:32:53:08

### Locomotion:

First land vertebrates	08:27:05:08 – 08:28:50:29
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### Habitats/Communities:

Amphioxus	08:05:19:22 – 08:06:31:21
First land vertebrates	08:27:05:08 – 08:28:50:29
Snakes	08:28:58:18 – 08:31:04:22

Anaconda	08:31:15:25 – 08:32:53:08
Animal diversity	08:50:26:03 – 08:52:59:25

### Paleontology/Evolution:

<i>Pikaia</i>	08:08:01:19 – 08:08:46:19
Amphioxus and vertebral column	08:08:47:00 – 08:09:51:12
Amphioxus development	08:11:10:21 – 08:12:29:29
Jaws and fish diversity	08:14:12:03 – 08:15:56:10
Tunicate diversity, feeding, evolution	08:15:57:13 – 08:18:23:14
Fish invasion of land	08:18:24:13 – 08:22:34:14
Invasion animation	08:25:50:15 – 08:26:34:22
First land vertebrates	08:27:05:08 – 08:28:50:29
Snakes	08:28:58:18 – 08:31:04:22
Dinosaur evolution	08:35:39:27 – 08:43:01:12
First mammals	08:43:01:11 – 08:46:16:06
Play	08:45:50:05 – 08:47:21:19
Human evolution	08:47:20:25 – 08:52:59:26
Animal diversity	08:50:26:03 – 08:52:59:25

### Life Cycle/Reproduction:

First land vertebrates	08:27:05:08 – 08:28:50:29
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### Anatomy/Zoology:

Amphioxus	08:05:19:22 – 08:06:31:21
<i>Pikaia</i>	08:08:01:19 – 08:08:46:19
Amphioxus and vertebral column	08:08:47:00 – 08:09:51:12
Amphioxus development	08:11:10:21 – 08:12:29:29
Fish invasion of land	08:18:24:13 – 08:22:34:14
First land vertebrates	08:27:05:08 – 08:28:50:29
Snakes	08:28:58:18 – 08:31:04:22

### Genetics:

Amphioxus development	08:11:10:21 – 08:12:29:29
Large vertebrates	08:12:37:28 – 08:14:11:04

### Science Process:

Jennifer A.Clack, Ph.D.	
“Boris” the tetrapod	08:18:51.04 – 08:23:01.05
Early chordate footprints	08:23:01.00 – 08:26:34.21
Linda Z.Holland, M.A.	
Amphioxus ancestors	08:04:39.17 – 08:08:35.03
Amphioxus ancestors’ genetics	08:09:51.09 – 08:12:30.05
Kristi Curry Rogers, Ph.D.	
Dinosaur bones	08:38:53.12 – 08:42:19.16

### Science Careers:

Ray Bandar	
Skulls and bones, teacher	08:33:10.06 – 08:35:38.22
Jennifer A.Clack, Ph.D.	
Joy of paleontology	08:18:51.04 – 08:23:01.05
Linda Z.Holland, M.A.	
Amphioxus ancestors	08:04:39.17 – 08:08:35.03
Kristi Curry Rogers, Ph.D.	
Dinosaur hunter	08:36:21.25 – 08:38:53.23