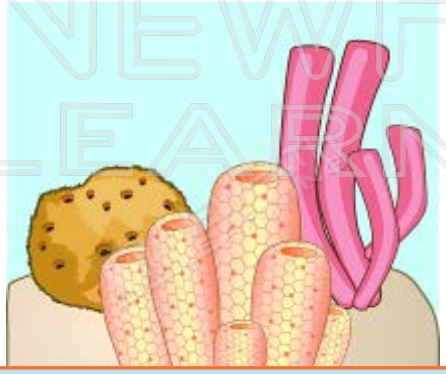
SPONGES, CNIDARIANS AND WORMS

Sponges

Sponges are very different than most other animals.

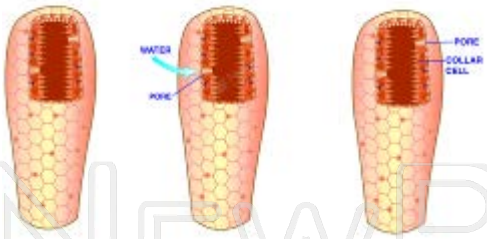


Unti
The
Whe
hard
spor
and

Stru
Like
in it

PREVIEW

Please Sign In or Sign Up to download the printable version of this worksheet



A sponge feeds similar to how a strainer works.
Tiny food particles will pass through the pores and the **collar cells** on the inside of the central cavity will trap and digest them. A sponge will also get oxygen from the water that passes through the pores.

© Copyright NewPath Learning. All Rights Reserved.
Permission is granted for the purchaser to print copies for non-commercial educational purposes only.
Visit us at www.NewPathWorksheets.com.

Oxygen will diffuse or pass through the outer tissue and into the sponges' cells. The outside surface of some sponges contains structures known as spikes. Spikes give the sponge its shape and allow it to stay upright. The spikes also give the sponge protection from predators. A sponge reproduces both asexually and sexually.

Lesson Checkpoint: What characteristic puts Sponges in the Animal Kingdom?

Sponge Reproduction

When a sponge reproduces asexually, it uses a process known as budding. A sponge is not male or female, but they are able to produce both egg and sperm cells. A sponge will go back and forth producing sper
The
cells

Afte
look
A la
find

PREVIEW

Please Sign In or Sign Up to download the printable version of this worksheet

Cha

Cni
into
exa

Cnidarians are carnivores with tentacles that help them to capture prey and discourage predators. Cnidarians have specialized tissue that helps them to move in their environment.

This tissue allows them to respond quickly to danger or to capturing prey. All cnidarians have radial symmetry, but they have two types of body plans: **polyp or medusa**.

A **polyp** is shaped similar to a vase and has a mouth opening at the top.

The majority of polyps attach themselves to a hard surface where they live most of their lives.

© Copyright NewPath Learning. All Rights Reserved.
Permission is granted for the purchaser to print copies for non-commercial educational purposes only.
Visit us at www.NewPathWorksheets.com.

A **medusa** is a cnidarian body plan that is bowl-shaped and a free swimming animal with the mouth opening at the bottom. Some species of cnidarians go through a polyp stage and a medusa stage while some are one or the other.

A cnidarian feeds by using its poisonous stinging cells to inject their prey. The venom usually paralyzes the prey so that they can pull the prey into their mouths and digest it. Cnidarians have only one opening in their digestive tracts so the food that is not digested exits through the mouth. Cnidarians reproduce sexually and asexually. Most polyps reproduce by budding.

Some cnidarian species reproduce sexually. Some species have both male and female reproductive structures, while others only have one. If they have only male or female reproductive structures then they repr

PREVIEW

Please Sign In or Sign Up to download the printable version of this worksheet

W **an**

Cha

Scie

The s.

All w

with

tissu d a head.

A worm's head has a very simple brain that consists of basic nerve tissue. This allows worms to be able to sense their environment quicker. They sense mates, food, and predators. This gives them the ability to respond quickly to their environment. Worms reproduce sexually and asexually. In most worm species there are either male or female individuals, but some species contain both male and female sex organs. There are species of worms that are able to break apart into many pieces and each piece will grow into an identical organism. Other species of worms are able to regenerate.

Regeneration is when an organism is able to regrow parts of its body.

© Copyright NewPath Learning. All Rights Reserved.
Permission is granted for the purchaser to print copies for non-commercial educational purposes only.
Visit us at www.NewPathWorksheets.com.

Flatworms

Flatworms are worms that are flat. Most flatworms are too small to be seen, but there are species that can grow up to ten meters long.

Most species of flatworm are parasites and live and feed off of their host, which we learned about in Topic 8.
Flatworms called **planarians** are not parasitic. They live freely in their environment.

Planarians have two dark spots on their head that are called eyespots, which can sense changes in light.
The sense that the planarians rely on most to help them find food is their sense of smell.

Roundworms

Scie
eart
dam ve
bod

Rou
para es
of th

Rou h
end is
an o m.
This

PREVIEW

Please Sign In or Sign Up to download the printable version of this worksheet

Segmented Worms

If you have ever been outside in the spring while it was raining, you probably saw an earthworm at some point. Earthworms are called segmented worms. Leeches are another example of segmented worms. Segmented worms inhabit most of the environments on earth. Segmented worms live in burrows in the ground, which give them protection and allow them to hunt for prey.
If you look closely at a segmented worm, you will notice that its body is made up of many rings with grooves in between each ring. Segmented worms have bodies that are made up of many different sections, which are called segments. Each of the segments contains similar organs while some of them contain other organs like the reproductive organs.

© Copyright NewPath Learning. All Rights Reserved.
Permission is granted for the purchaser to print copies for non-commercial educational purposes only.
Visit us at www.NewPathWorksheets.com.

Lesson Checkpoint:
Why are they called segmented worms?

The nerve chord and the one-way digestive tract run the entire length of the body.

A segmented worm has a **closed circulatory system**, which allows the blood to move throughout the body in a network of tubes that are called blood vessels. In sections of the segmented worms there are pairs of organs that pump the blood around the body. These structures act like a heart. This allows segmented worms to grow large because oxygen can get to all of the cells easier.

PREVIEW

Please Sign In or Sign Up to download the printable version of this worksheet

© Copyright NewPath Learning. All Rights Reserved.
Permission is granted for the purchaser to print copies for non-commercial educational purposes only.
Visit us at www.NewPathWorksheets.com.