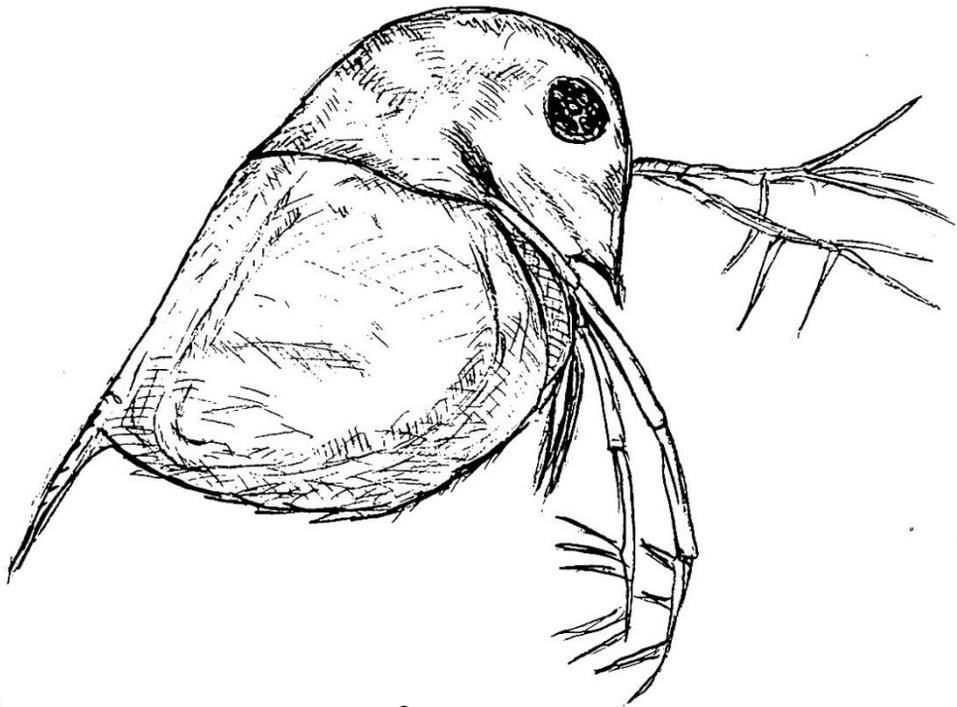


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Pond Life Colouring

There are loads of living things in a pond. Ducks, frogs, fish and water lilies are easy to see because they're big but here are some things so small you might not even know they're there!

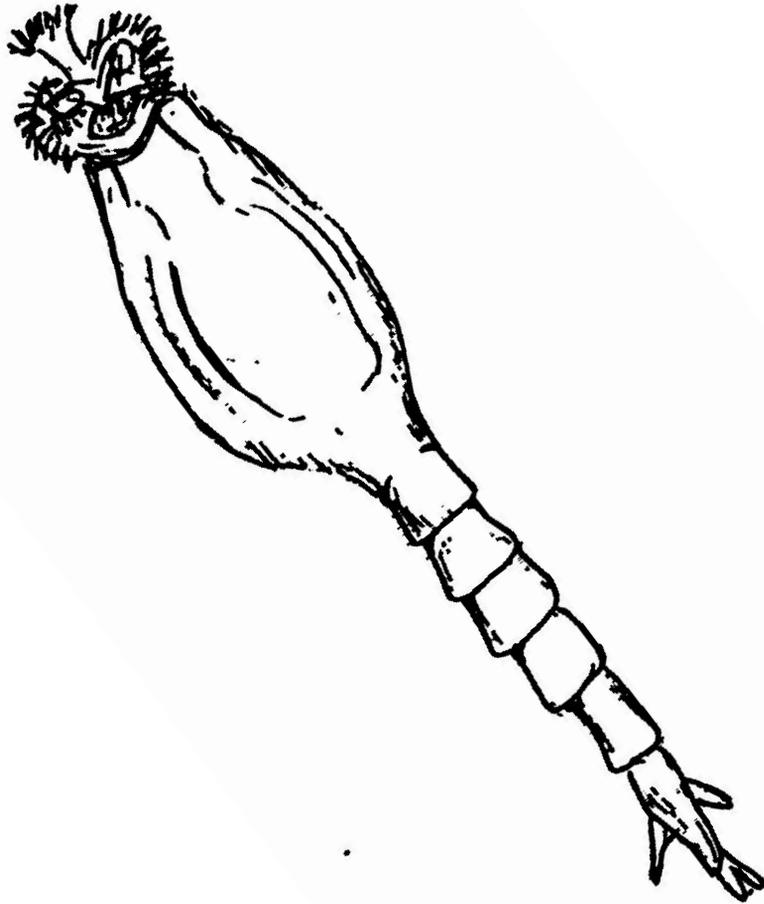


## Daphnia

Daphnia are often called "Water Fleas" because they're tiny, live in water and look like they're jumping around but they're not fleas. They're tiny relatives of crabs and shrimps - *Crustaceans*.

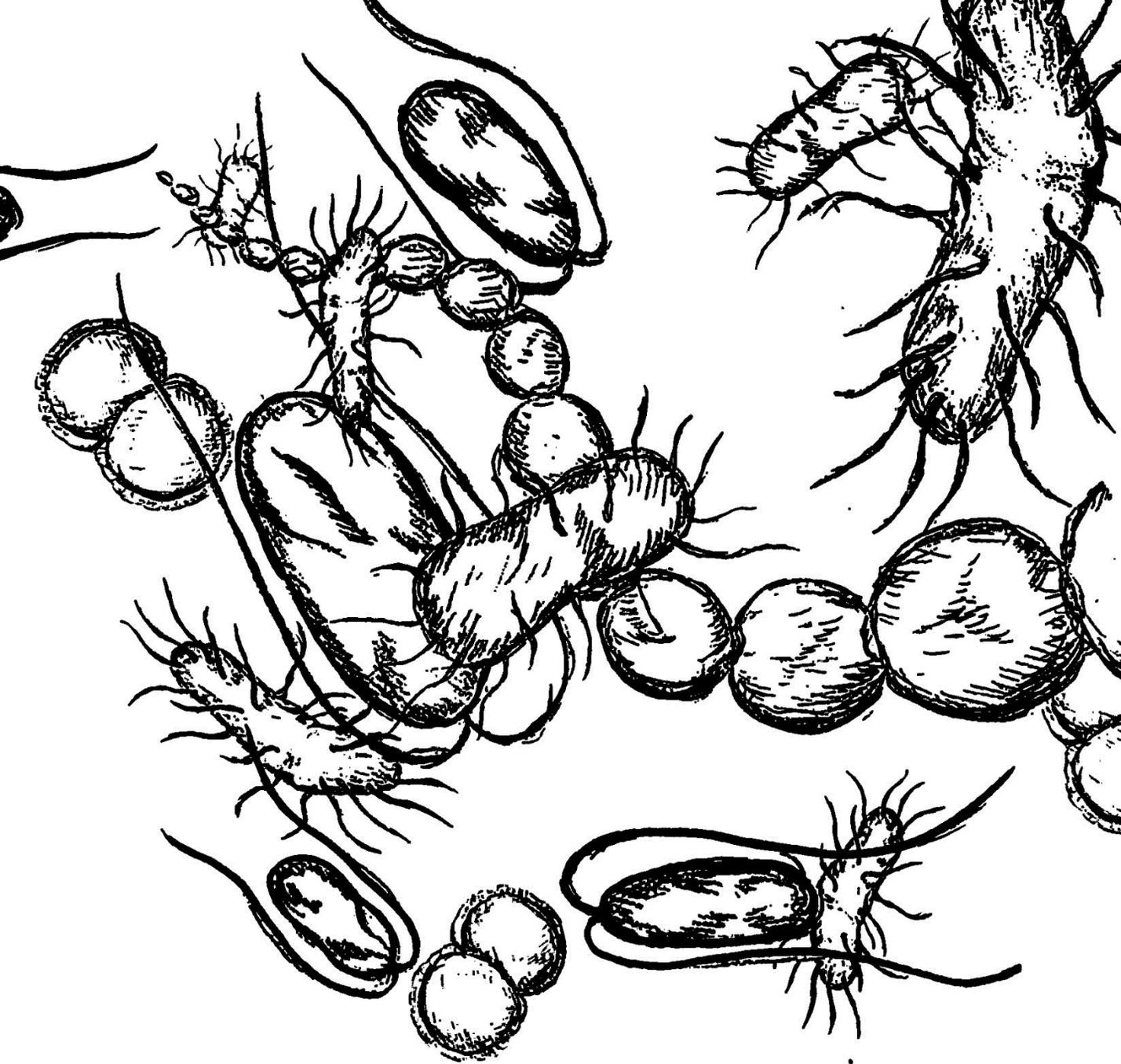
They are *filter feeders* - they sieve algae and bacteria out of the water for food and are important because they help keep water clean and are eaten by lots of other animals - especially fish.

# Rotifers



Rotifers are tiny - just a tenth of a millimetre across - that's twenty times smaller than a daphnia - but they're still animals! They have a mouth and digestive system, a brain and eyes. Their mouth is covered in tiny hairs - *cilia* - that constantly wave around scooping tiny particles of rotten bits of plants, bacteria and algae into their mouths.

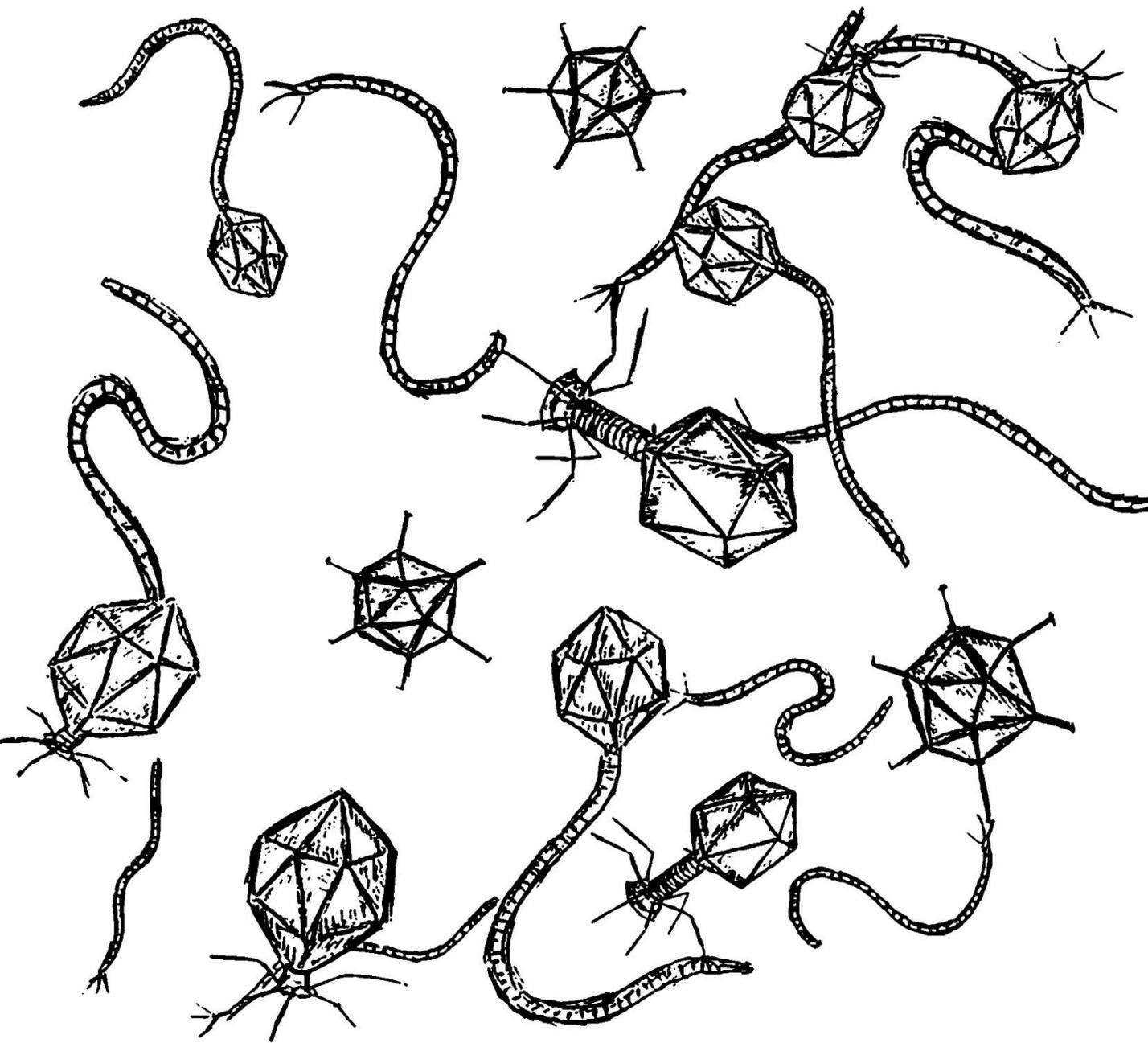
They can swim around or stick to something and crawl like a caterpillar and they're a tasty snack for many fish.



# Bacteria

Bacteria are tiny single celled living things. Some might make us sick but most of them are completely harmless and some like the bacteria in our intestines help us digest food. We use bacteria to make yoghurt and cheese from milk.

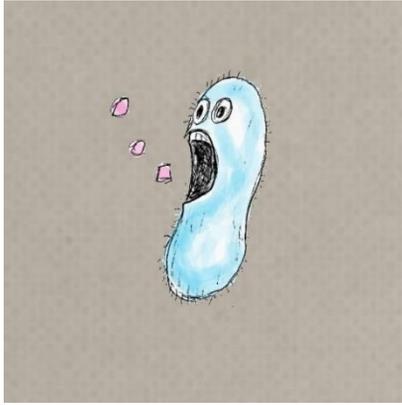
Many bacteria can swim with tiny tail like bits called *flagella* that spin around to pull the cell through the water. Loads of bacteria like to stick together in clumps or long chains. They're eaten by things like amoeba and daphnia.



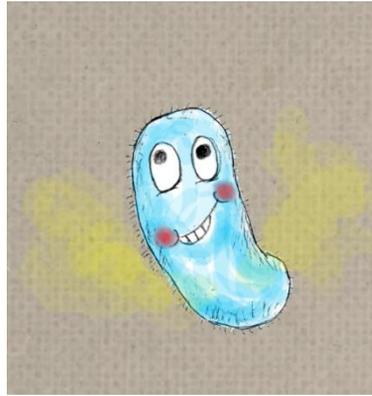
# Viruses

Our favourite! There are hundred and hundreds of millions of viruses in the world. They're not alive but they infect living things to make copies of themselves. Most viruses attack bacteria - because there are loads of them around to infect - but some do make us ill. Flu, measles, chicken pox and verrucas are all caused by viruses.

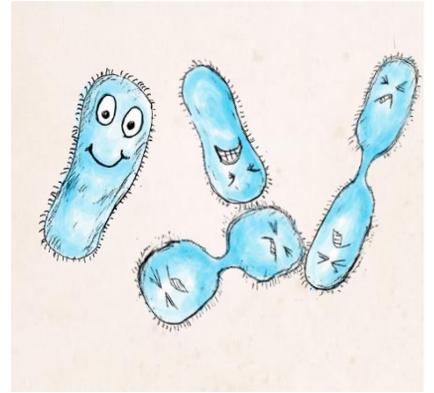
Can you name three things all living cells have to do?



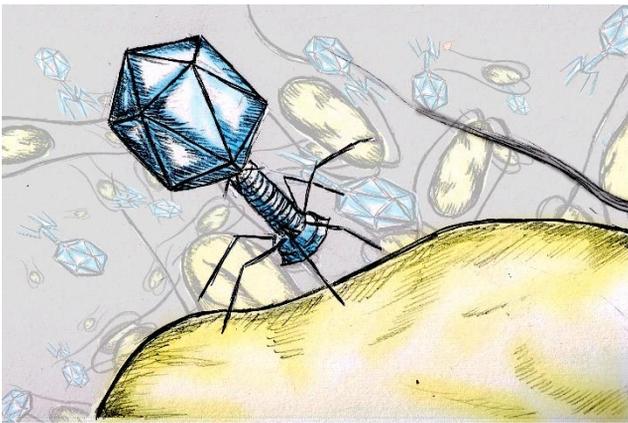
E \_ \_



Ex \_ r \_ t \_



M \_ \_ \_ C \_ \_ \_ \_ s



Something a virus has to do to reproduce

I \_ f \_ \_ \_



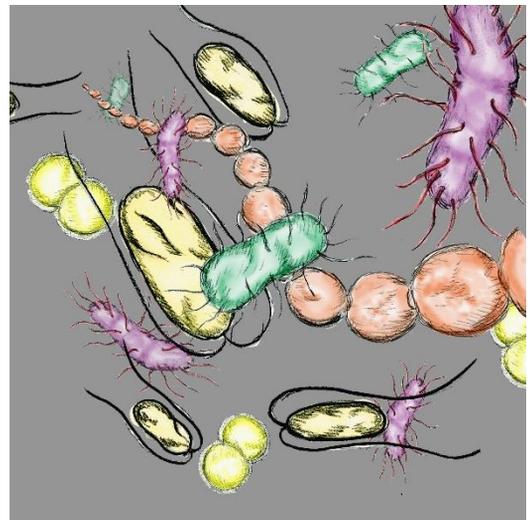
The set of instructions that all living cells have

\_ \_ \_ \_



The machine we use to spin things really fast

C \_ n \_ \_ \_ f \_ \_ \_



Tiny, single celled living things

B \_ c \_ \_ \_ \_ a

# Fill in the blanks

All living \_\_\_\_\_ contain \_\_\_\_\_ which is the set of instructions to make everything a cell needs. Each individual instruction is called a \_\_\_\_\_.

A virus is not \_\_\_\_\_, it needs to get inside a living cell to make copies of itself. When a virus \_\_\_\_\_ a cell, it adds its own set of genes that force a cell to make more copies of the virus.

Most \_\_\_\_\_ don't infect people or make us \_\_\_\_\_, they attack bacteria. We call these viruses \_\_\_\_\_ and some of them might be useful for treating diseases that are caused by \_\_\_\_\_.

DNA, infects, sick, bacteriophage, bacteria, cells, gene, alive, viruses

## Virus Hunters The Word Search

L R E R S U R I V V Z M  
Y S U G S B M Z L N H I  
E U C N F B K H X C W C  
K S E O G D N O P E F R  
A C N I X V B I Z J C O  
L I T T O Q A D V D E S  
L E R C J A C K Q A R C  
J N I E F M T X E O M O  
D T F F U I E B K B O P  
N I U N V E R E V I R E  
A S G I K B I L L E C D  
O T E L N B A R I K Y H

VIRUS  
BACTERIA  
DNA  
CELL  
INFECTION  
MICROSCOPE  
POND  
RIVER  
LAKE  
CENTRIFUGE  
SCIENTIST