



photo by Bruce Fingerhood

Have you ever been around a pet rat, perhaps in your classroom? Maybe you have seen rats in an alley or field near your home.

Over the centuries, rats have caused a lot of trouble for people. But they have also helped us learn more about ourselves. The Mini Page looks at this sometimes creepy, sometimes helpful animal.

## The rodent family

A rat is a **rodent**. Rodents include animals such as mice, guinea pigs, hamsters, squirrels, chipmunks and beavers. Rodents make up the largest group of mammals on Earth. There are about 2,300 **species**, or kinds, of rodents.

Rodents all have long, sharp teeth called **incisors**. Many other animals, including humans, have incisors too. But in rodents, the incisors are especially long. They keep growing throughout most of a rodent's life.

Rodents also have powerful jaw muscles. Rodent jaws and incisors are specially adapted to gnaw through hard material. For example, a beaver can chew through trees. Rats can chew through lead and aluminum. Rats also dig with their incisors.

## The Norway rat

The Norway rat is the most common rat in the United States. It is the kind you will most likely see in cities or as a pet.



photo by Staffan Vilcans

## Mini Fact:

There are about as many rats in the United States as there are humans. However, many species of rats live in the wild, away from humans. They live in fields, forests and marshes.

It is also known as the brown rat, wharf rat, sewer rat or water rat. It can be white, brown or black.

The Norway rat probably came from China. It got its name because people thought it came to Norway from Asia and then spread through Europe.

Norway rats thrive in cities, living in garbage dumps, sewers and buildings. They are mostly **nocturnal**, which means they are most active at night.

Norway rats are great swimmers. They eat almost any type of food.

A Norway rat's incisors grow about 4 to 5 inches a year. They need to keep chewing on things to wear down their teeth.

## Rats and humans

Some rats, such as Norway rats, share many behavior **traits**, or characteristics, with humans. Both:

- are social animals; they like to hang out with others of their kind.
- are adaptable.

Rats and humans can figure out how to live in all sorts of conditions. This has helped both species **thrive**, or do well, all over the world.

- can learn new things.
- can teach what they have learned to their young.



photo courtesy Converse College

## Try 'n' Find

Words that remind us of rats are hidden in this puzzle. Some words are hidden backward or diagonally, and some letters are used twice. See if you can find:

CHEW, CHINA, CONTAMINATE, DISEASE, FOOD, GNAW, HUMANS, INCISOR, JAWS, NORWAY, PEST, PET, RATS, RODENT, SCIENCE, SPECIES, SWIM, TEETH, TRAITS, WILD.

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



## Cook's Corner

### Strawberry Gelatin Treat

#### You'll need:

- 1 (6-ounce) package sugar-free gelatin
- 2 cups boiling water
- 1 cup fat-free strawberry yogurt
- 2 cups sliced strawberries

- 1 small banana, sliced



#### What to do:

1. Dissolve gelatin powder in 2 cups boiling water. (Do not add additional cold water.)
2. Stir in strawberry yogurt until well-mixed.
3. Add fruit to mixture.
4. Chill for several hours until set. Serves 4.

\* You'll need an adult's help with this recipe.

1. Covered with a hairy coat (fine, soft, thick) (5-letter adjective)

□ □ □ □ □

2. Place where some animals live and lay eggs (4-letter noun)

□ □ □ □

3. Rear part of a body with growth at the end (4-letter noun)

□ □ □ □

4. Long and short hair growing near the mouth (8-letter plural noun)

□ □ □ □ □ □ □ □

1. The \_\_\_\_\_ rat always hides in a hole in the kitchen wall.
2. Rodents will make a new \_\_\_\_\_ every year in a pile of logs.
3. My gray cat chases a big, black rat with a long \_\_\_\_\_.
4. When a rat moves his \_\_\_\_\_, Roberta laughs.

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by Jan & Carey Orr Cook



Study the definition. When you know the missing word, fill in the letter boxes and the sentence blanks.

Answers: Furry, Nest, Tail, Whiskers.

## Helping humans

Scientists have learned a lot about humans by studying rats. Partly because rats adapt and learn so quickly, they are great subjects for experiments.

They can learn to go through mazes or hit certain levers to get food. They can teach their young how to perform the same tasks.

Also, rats are small and reproduce quickly. That makes them good animals to study as well.

## Hurting humans

Rats have caused people a lot of trouble. Sometimes rats attack, and even kill, humans.

They carry more than 40 diseases harmful to humans. Some of these diseases include bubonic plague, typhus and rat-bite fever.

Rats destroy about 20% of all the agricultural products in the world every year. What they don't eat, they may **contaminate**, or make unsafe, with their droppings.

Experts believe many unexplained house fires have been caused by rats chewing on the wiring. They also chew on wires in cars. Rats can tunnel under buildings, weakening the structure.



## Resources



### On the Web:

- [bit.ly/MPrats](https://bit.ly/MPrats)

### At the library:

- "Oh, Rats! The Story of Rats and People" by Albert Marrin
- "Rats Around Us" by Rachel Eagen

## Mini Jokes



**Ronny:** Can you spell "RAT TRAP" with three letters?  
**Ruth:** C-A-T!

## Eco Note



A U.S. survey of wild deer in four states found that many of the animals showed signs of being infected with the COVID-19 virus. The finding suggests that even if the virus is brought under control in the human population, wild animals could act as reservoirs for the virus in the future. The U.S. Department of Agriculture says none of the infected animals appeared to be ill, and it is not certain how they were exposed.

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## For later:

Look in your newspaper for stories about researchers using rats to help cure diseases or learn more about humans.

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