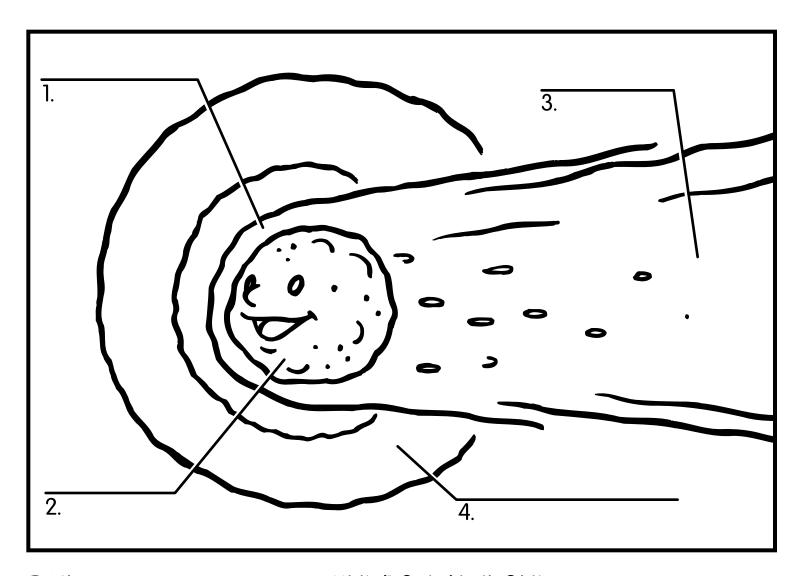
# WHAT'S A COMET?

A comet is a cold ball of dust and gas that orbits the sun much like the planets do, though they are usually much farther away. Most comets we can see only come close to Earth once in a lifetime! Color and label the parts of the comet below using the definitions and clues. Check you answers at the bottom.



#### TAIL

Behind a comet follows its TAIL. We can see this tail because heat from the sun melts some of the ice from the center, and the sunlight reflects from the water vapor. The tail of one comet was 300 million miles long!

## COMA

The COMA sits very closely all around the center of the comet. Is is a dense cloud of gases.

## HYDROGEN CLOUD

Some comets have a HYDROGEN CLOUD, which surrounds the nucleus, coma, and part of the tail. The hydrogen cloud can be as big as 2 million miles across!

#### **NUCLEUS**

The NUCLEUS of a comet is its center. It has been described as a "dusty snowball". It is made up of small pieces of rock stuck inside a chunk of ice and frozen gases.

4. hydrogen cloud

2. nucleus

I. coma **YUSWERS:**