8th Grade Passages

Middle of Year (MOY) Student Packet

A Great Comet

For six months in 1997, people watched a glowing object in the night sky. Comet Hale-Bopp made
18 a show in the sky that lasted from January to June. Its head shone as brightly as a star. Its tail swept
40 back like a fan. Some people thought it might be the best comet to pass by Earth in 20 years.

60 Comets begin as dirty chunks of rock in an icy fog. Some of these rocks move toward the sun
79 when its gravity pulls them. Once the rocks get near the sun, they begin to look like comets. Each
98 comet forms a tail and a round head that are characteristic of all comets. The round head and tail
117 make a comet easy to recognize. Comets travel in orbits, or circles, around the sun. These orbits
134 can be big or small. Comets that make small orbits around the sun come near Earth every 200
152 years or less. They are not very bright, but we see them more often.

166 Hale-Bopp is a comet that makes big orbits around the sun. It will not pass near Earth again for
186 about 2,400 years.

189 In the 1990s about 12 comets a year were discovered. Most of these could not be seen in the sky
209 without special equipment because they did not come very close to Earth. Even though Hale-Bopp
225 was far away from Earth, it could be seen because its head was huge. The heads of most comets
245 are no larger than six miles in diameter. Hale-Bopp's head was about 25 miles across. Because
263 of its size, Hale-Bopp glowed brightly. Most of the famous comets have had long, thin tails that
280 streamed for millions of miles. Hale-Bopp's tail was wider and shorter.

291 People enjoyed watching Hale-Bopp for several reasons. It glowed brightly. Hale-Bopp could be
306 seen without a telescope for six months, from an hour after sunset until an hour before sunrise each
324 day. Everyone had sufficient time to see this bright traveler. There were plenty of chances to look
341 at it. There will continue to be many more comets for us to see. Like Hale-Bopp, they will look
362 like glowing balls in the night sky.
368

Let's Do It Again

My heart was beating so loudly that I was sure everyone could hear it over the slow rumbling of
19 the motor. I jumped into the water and put on my skis. Slowly the boat crept forward, tightening
37 up the ski rope. I held on for dear life to the handle on the end of the rope while Mom smiled
59 encouragingly at me from the back of the boat.

68 I was trying very hard to recover my earlier feelings of excitement about learning to water-ski.
85 "Whose bright idea was this anyway?" I asked myself anxiously. I sat in the cool water bobbing
102 gently in my bright orange life jacket. I tried to keep the tips of my water skis pointing up out
122 of the water as I had been shown. A wave of fear washed over me. There were just too many
142 instructions to remember. My little sister Nikki cheered as she jumped up and down in the back of
160 the boat next to Mom.

165 Nikki had learned to water-ski at a very young age. I, on the other hand, always liked underwater
184 sports such as scuba diving. Moving on top of the water was going to be very different for me. But
204 once I mastered this, we would have another activity that the whole family could enjoy together.

220 "Deep breath," I reminded myself. Dad pulled back the lever to open up the throttle. The motor
237 roared to life. "Here we go," I thought wildly.

246 Mom gave me a big thumbs-up, and the boat lurched forward and gave a mighty pull. I pushed
265 up on my legs as hard as I could and let out a yell. I was actually standing on my skis, skimming
287 across the water, but not for long. I fell forward and landed facedown in the water. Thank goodness
305 I remembered to let go of the rope. My skis came off, and my life jacket kept me floating on the
326 surface of the lake.

330 "I don't believe it," I thought, flipping over to my back with a grin. "I almost felt like I was
350 flying."

351 "Let's do it again," I called to Dad as he circled the boat around to pick me up.
369

The Parthenon

The Parthenon, a building in Athens, Greece, is perhaps one of the most memorable structures on
16 Earth. Built 25 centuries ago, it is one of the great architectural achievements of the ancient world.
33 There are many reasons for its greatness.

40 Athens was the most important city in ancient Greece. In 480 B.C. Greece was under attack by
57 both the Persian army and the Persian navy. The Athenian commander, Themistocles, knew that
71 his forces could not defeat the Persian army then marching toward Athens. Hoping instead to
86 make a stand against the Persians at sea, Themistocles and his forces fled Athens for a nearby
103 island. Although the Persian army overwhelmed Athens and left it in ruins, the Greek navy, led
119 by Themistocles, annihilated the Persian fleet. This victory by the Greeks led all Persian forces
134 to retreat within one year. About 30 years later the building of the Parthenon began. Construction
150 took place between 447 and 432 B.C. during the rule of Pericles. The Parthenon was constructed
166 on the same site as an unfinished structure intended to honor the men who had lost their lives in
185 an earlier battle against the Persians. The Parthenon would stand as a symbol of the strength and
202 importance of the Greek people.

207 Many important cities in ancient Greece had an acropolis, or "high city," on which people
222 constructed important buildings. The acropolis was the highest and most defensible location, so
235 it also served as a fortress in the event of enemy attack. The Parthenon is located about 500 feet
254 above the city of Athens. Before the Parthenon could be built, some areas of the acropolis had to
272 be leveled down, and other areas had to be built up. Then a large, solid foundation was constructed
290 out of limestone blocks. The entire area was buttressed by a reinforcing wall.

303 The Parthenon is a rectangular structure consisting of two inner areas surrounded by columns.
317 There are eight columns at each end and seventeen columns along each side. It is a large structure,
335 considering when it was built. It is about 200 feet long and about 100 feet wide. It stands about 60
355 feet high.

357 One extraordinary aspect of the Parthenon is its construction. It required between 20,000 and
371 30,000 tons of marble that had to be precisely carved so that huge blocks of it could be fitted
390 together without mortar to form the columns and the interior walls.

401 Perhaps even more impressive are the "optical corrections" that were used. The columns bulge
415 slightly in the middle because experience had shown the Greeks that perfectly straight columns
429 would not look straight to the viewer. Because corner columns normally appear smaller than

443 others, the corner columns of the Parthenon were made slightly thicker and were placed closer
458 to the other columns. The columns were also designed to lean inward slightly because perfectly
473 perpendicular columns seem to slant outward. Furthermore, the platform on which the Parthenon
486 sits was made to curve upward in the middle because a perfectly level floor would appear to sag in
505 the center.

507 The Parthenon stands today despite the centuries that have passed. It is a timeless tribute to the
524 enduring culture of the Greek people and is considered a model of excellence in concept and
540 construction. It established the classic style of architecture seen today in many public buildings,
554 such as the White House and the Lincoln Memorial in Washington, D.C. This architectural style is
570 a lasting gift from the ancient Greeks to the modern world.
581