Pathfinder Name: ____________________________________________

Waterfalls

1. Define the following types of waterfalls and give one example of each:
   a. Block:
   b. Cascade:
   c. Horsetail:
   d. Plunge:
   e. Segmented:
   f. Tiered:

2. Choose 10 Waterfalls, including 2 near where you live:

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<tr>
<th>Name</th>
<th>Height</th>
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3. Complete two of the following activities:
   a. Visit a waterfall and write a paragraph telling about your experience:

   b. Choose a waterfall (other than ones in #2) of interest to you and record facts and interesting information about the falls that you have selected.

   c. Watch a video about a waterfall (meaningful video - not just a 2 minute tourist video.)
   d. Make a scrapbook about waterfalls. Include pictures of waterfalls and important information about each one. This may be a group project.
   e. Using the information provided, create a crossword or word search puzzle:

   1. Tallest waterfall in the world at 3212 feet.
   2. Tallest waterfall in New Zealand.
   3. Waterfall flowing from a glacier in Iceland.
   4. Waterfall on an Indian reservation in Arizona.
   5. Largest waterfall in China.
   6. 275 falls on the border of Argentina and Brazil.
   8. Well known tiered waterfall in Norway.
   9. Tiered waterfall along the Columbia Gorge in Oregon.
   10. Most powerful waterfall in North America.
   11. Tallest year-round falls in Japan.
   12. Cree Indian name for a waterfall in British Columbia.
   13. 2nd tallest waterfall in the world, found in South Africa.
   14. Largest waterfall in the world.
   15. Popular tourist attraction in a National Park in California.
   16. 5th tallest waterfall in the world, 2nd tallest in Peru.

   Crossword Answers:
4. Water is mentioned in each of the following verses. Describe what is happening in each verse, then tell what the water symbolizes.
   a. John 9:11 – An he told them, “A man they call Jesus made mud and smoothed it over my eyes and told me to go to the Pool of Siloam and wash off the mud. I did, and I can see!”

   b. John 13:5 – [Jesus] poured water into a basin, and began to wash the disciples’ feet and to wipe them with the towel he had around him.

   c. Matthew 3:16 – After his baptism, as soon as Jesus came up out of the water, the heavens were opened to him and he saw the Spirit of God coming down in the form of a dove.
Niagara Falls - American Falls –

Type: A block waterfall descends from a wide stream

Total height: 167 ft (51 m)

Niagara Falls is the collective name for three waterfalls that straddle the international border between the Canadian province Ontario and the American state of New York: Horseshoe Falls, the American Falls and the Bridal Veil Falls (largest to smallest)

Horseshoe Falls is the most powerful waterfall in North America, as measured by flow rate

The falls are 17 miles (27 km) north-northwest of Buffalo, New York, and 75 miles (121 km) south-southeast of Toronto

Monkey Falls - in Tamil Nadu, India

Type: a cascade is a waterfall that descends over a series of rock steps. Monkey Falls, in the Indira Gandhi Wildlife Sanctuary and National Park in Tamil Nadu, India, is a gently sloping cascade. The waterfall is safe enough for children to play in the water.

With a height of about 60 feet, these falls are very close to the main road and easily accessible. Bathing is possible at bottom of the falls, though it's bit dangerous during monsoons when the water flow is high.

Best time to visit the falls is between October & March. This place attracts several thousands of tourists across the year and usually crowded on weekends. It is easily accessible by Bus from Pollachi. All the buses between Pollachi and Valparai stop here

Costs about 20 indian rupee to enter
The Iguazu Falls on the border of Brazil & Argentia

Type: cataract - a powerful, even dangerous, waterfall. Among the widest and wildest of cataracts are the thundering waters of the Iguazu River on the border between Brazil and Argentina.

Also called Iguazú Falls, Iguassu Falls, or Iguaçu Falls are waterfalls of the Iguazu River on the border of the Argentina and the Brazil. Together, they make up the largest waterfall system in the world. The falls divide the river into the upper and lower Iguazu. The Iguazu River rises near the city of Curitiba. For most of its course, the river flows through Brazil; however, most of the falls are on the Argentine side. Below its confluence with the San Antonio River, the Iguazu River forms the boundary between Argentina and Brazil.

The name "Iguazú" comes from the Guarani or Tupi words "y" [i], meaning "water", and "ûasú "[wa′su], meaning "big".[3] Legend has it that a deity planned to marry a beautiful woman named Naipi, who fled with her mortal lover Tarobá in a canoe. In a rage, the deity sliced the river, creating the waterfalls and condemning the lovers to an eternal fall. The first European to record the existence of the falls was the Spanish Conquistador Álvar Núñez Cabeza de Vaca in 1541.

Total height: 60–82 metres (197–269 ft)  Number of drops: 275  Total width: 1.7 mi

Courthouse Falls in Pisgah National Forest, Transylvania County, North Carolina

Type: Slide - Water glides down maintaining continuous contact

Total height 40 ft (12 m)

Courthouse Creek flows near in the Pisgah National Forest near a mountain called the Devil's Courthouse. Courthouse Creek flows through a narrow chute into a natural amphitheater of bedrock.
Angel Falls in Venezuela

Type: Plunge - water descends vertically, losing contact with the bedrock surface.

In the native peoples’ language the Pemon language: Kerepakupai Meru meaning "waterfall of the deepest place", or Parakupá Vená, meaning "the fall from the highest point"). It is the world's highest uninterrupted waterfall, with a height of 979 metres (3,211 feet) and a plunge of 807 metres (2,368 feet).

The falls are along a fork of the Rio Kerepacupai Meru which flows into the Churun River, a tributary of the Carrao River, itself a tributary of the Orinoco River.

The waterfall has been known as the Angel Falls since the mid-20th century; they are named after Jimmie Angel, a US aviator, who was the first person to fly over the falls. Following directions given by the explorer Félix Cardona who had seen the waterfall six years before, flew over them on 16 November 1933 on a flight while he was searching for a valuable ore bed. Returning on 9 October 1937, Angel tried to land his Flamingo monoplane El Río Caroní atop Auyán-tepui, but the plane was damaged when the wheels sank into the marshy ground. Angel and his three companions, including his wife Marie, were forced to descend the tepui on foot. It took them 11 days to make their way back to civilization by the gradually sloping back side, but news of their adventure spread and the waterfall was named Angel Falls in his honor. The name of the waterfall—"Salto del Ángel"—was first published on a Venezuelan government map in December 1939.

The Fang in Vail, Colorado

Type - frozen waterfall and a plunge waterfall. Even when it is frozen, it will not change its shape. This is the reason why it is an attraction for climbing, and very few waterfalls have this combination. This is because a normal plunge waterfall has fast plunge speeds, making it hard to freeze.

The Fang is a 165 foot tall waterfall in the town of Vail, Colorado.

The Fang gets its popularity mainly during winter months. The reason for this is because at this moment of year, the waterfall will freeze into a thick ice pole, and climbers enjoy climbing to the top. Climbing to the top of the waterfall is very difficult, meaning the climbers must wear climbing material. Many enjoy climbing the 26 foot wide, 165 foot tall waterfall completely frozen in time and space.
Punch Bowl Falls is a waterfall on Eagle Creek in the Columbia River Gorge National Scenic Area, Oregon, United States. Eagle Creek drains into the Columbia River, with its outlet on the Columbia River Gorge in Multnomah County.

Type: Punchbowl - Water descends in a constricted form and then spreads out in a wider pool.

The falls is 35 feet (11 m) tall and 10 feet (3.0 m) wide. Eagle Creek cuts through a narrow channel and shoots powerfully into a large bowl that resembles a punchbowl. This waterfall was responsible for the waterfall classification type of punchbowl.

Victoria Falls in southern Africa on the Zambezi River at the border between Zambia and Zimbabwe.

Type: Segmented - Distinctly separate flows of water form as it descends.

David Livingstone, the Scottish missionary and explorer, is believed to have been the first European to view Victoria Falls on 16 November 1855, from what is now known as Livingstone Island, one of two land masses in the middle of the river, immediately upstream from the falls near the Zambian shore. Livingstone named his discovery in honour of Queen Victoria of Britain, but the indigenous Tonga name, Mosi-oa-Tunya—"The Smoke That Thunders"—continues in common usage as well. The World Heritage List officially recognizes both names.

While it is neither the highest nor the widest waterfall in the world, Victoria Falls is classified as the largest, based on its combined width of 1,708 metres (5,604 ft) and height of 108 metres (354 ft), resulting in the world's largest sheet of falling water. Victoria Falls is roughly twice the height of North America's Niagara Falls and well over twice the width of its Horseshoe Falls. In height and width Victoria Falls is rivalled only by Argentina and Brazil's Iguazu Falls.
Yosemite Falls is the highest waterfall in Yosemite National Park, dropping a total of 2,425 feet (739 m) from the top of the upper fall to the base of the lower fall.[1] Located in the Sierra Nevada of California, it is a major attraction in the park, especially in late spring when the water flow is at its peak.

Type: Tiered - water drops in a series of distinct steps or falls.

The falls consist of three sections: Upper Yosemite Fall: The 1,430-foot (440 m) plunge alone is among the twenty highest waterfalls in the world. Middle Cascades: Between the two obvious main plunges there are a series of five smaller plunges collectively referred to as the Middle Cascades. Taken together these account for a total drop of 675 feet (206 m), more than twice the height of the Lower Fall. Because of the narrow, constricted shape of the gorge in which these drops occur and the lack of public access, they are rarely noted. Most viewpoints in the valley miss them entirely. Lower Yosemite Fall: The final 320-foot (98 m) drop adjacent to an accessible viewing area, provides the most-used viewing point for the waterfalls.

In all but the wettest years, the falls cease flowing altogether in late summer or fall. A very small number of rock climbers have taken the opportunity to climb the normally inaccessible rock face beneath the falls, although this is an extraordinarily dangerous undertaking; a single afternoon thunderstorm could restart the falls, sweeping the climbers off the face.

Mitchell Falls in Kimberly, Australia

Type: Multi-step waterfall- A series of waterfalls one after another of roughly the same size each with its own sunken plunge pool.

It is a four-tiered fall located in Mitchell River National Park accessible only by helicopter or a rather arduous hike during the dry season.
Horsetail Fall flows over the eastern edge of El Capitan in Yosemite Valley.

Type: Horsetail

It's a small waterfall that many people don't notice, but it has gained popularity as more and more people have noticed it can glow orange during sunset in mid- to late February, in a way reminiscent of the Firefall that occurred historically from Glacier Point.

The "firefall" effect happens during the second half of February when there is a clear sky and enough snow for the waterfall to flow. Even some haze or minor cloudiness can greatly diminish or eliminate the effect.

Union Falls in Yellowstone National Park

Type: Fan - Water spreads horizontally as it descends while remaining in contact with bedrock.

Height 250 feet (76 m) is a waterfall on Mountain Ash Creek, a tributary of the Fall River in the Cascade Corner (southwest) of Yellowstone National Park. It is the second highest waterfall in Yellowstone exceeded in height only by the lower Yellowstone Falls. The falls got its name from members of the Arnold Hague Geological Surveys sometime between 1884-86. Geologist J.P. Iddings claims the name derives from the fact that a tributary of Mountain Ash Creek joins at the very brink of the falls, thus Union Falls.[2] Access to the falls is via the Mountain Ash Creek trail and the Grassy Lake Road.
Turtleback Falls

Drift Falls

Upper Bearwallow Falls

Sidepocket Falls