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Giant, Stinking Flower Blooms

LONDON, England (AP) — They held their breath for days, waiting for a gigantic flower to bloom for the fourth time this century. Then they held their noses.

But titan arum, which hadn't bloomed in London's Kew Gardens in 33 years, didn't live up to its reputation as a giant stinker.

"Disappointing," said Austin Hardy, 11, who came with five giggling friends wearing white face masks in anticipation of a major gross-out.

"I've got a very big nose and I couldn't smell anything," Monica Foster said.

Botanists and curiosity-seekers had been waiting since Monday for the 10-foot-tall plant to bloom, and the line of visitors stretched for 500 yards this afternoon.

Today's group was just too late, said Peter Boyce, a botanist at Kew.

Tuesday night, though, the bloom was something else, filling a Kew conservatory with its signature scent.

"It was quite overpowering at about 8 o'clock—a mixture of rotting flesh and burning sugar with ammonia over the top. It was a bit like a rubbish bin in summertime," Boyce said.

The smell—also described as fish-like—subsided within hours.

In the last few days the flower has been growing at an incredible rate—between four and six inches a day. Now its bell shape has fully opened to reveal a rich crimson color.

The titan arum, the largest flower in the world, has bloomed only four times at Kew Gardens, in 1889, 1901, 1926, and 1963.

Warned of the impending bloom, horticulturists and amateur gardeners hovered nearby and at last were rewarded.

Naturalist Sir David Attenborough said the stench wears off after a couple of days.

"The smell of rotting flesh is at its strongest when it first opens. After a couple of days it diminishes," said Attenborough, who once found one of the rare plants in the forests of Sumatra, Indonesia, where it is called "the corpse flower."

Attenborough said the aroma is produced to attract the attention of the sweat bee, an insect that lives in Sumatra's rain forests.

"Flowers aren't designed to smell nice for the benefit of humans," he said. "Some do because they are pollinated by honey bees; but bluebottles or blowflies will do the job just as well."

Flower Makes a Big Stink

Use information from the article on page 60 to answer the following questions: 1. What newsworthy event occurred in London's Kew Gardens? 2. How tall is titan arum? Besides Kew Gardens, where else can it be found? 3. When was the last time the giant flower bloomed? _____ 4. Why did Austin Hardy and his friends visit the botanical gardens wearing face masks? 5. How does botanist (a person who studies plants) Peter Boyce describe the scent of the rare plant? 6. Do you think that "the corpse flower" is a good name for the giant plant? Tell why or why not. 7. What insect is attracted to the stench (foul odor) of the bloom? 8. What happened to the huge, stinking plant a few days before its petals fully opened? 9. List two facts from the story that lead you to believe that the blossom is probably exceptionally beautiful. _____ 10. If the flower has such an awful odor, why do you think so many people wanted to smell it?

More Sightseeing

If you were touring London, you'd probably want to visit the Tower of London. Lots of people line up to see the tower's armor collection, the crown jewels, and the prison exhibit. Which display do you think would be most worth the wait? Explain.

Answer Key (cont.)

- It is unclear when the actual collapse occurred because clouds covered the mountain at the time of the fall.
- The face appears on the state quarter, road signs, and many souvenirs and tourist booklets.
- Daniel Webster was a 19th-century New Hampshire statesman. He wrote that the Old Man was a sign that God makes men.
- 9. Answers will vary.
- 10. Answers will vary.

Q and A #5 (page 49)

- 1. About 27 million children receive school meals each day.
- Schools are serving students healthier food in an effort to meet the requirements of federal officials.
- The Agriculture Department conducted the last survey during the 1998-99 school year.
- In 1991, a third of all elementary schools in the United States provided students with low-fat meals.
- 5. Answers will vary.
- Schools have trimmed fat, cholesterol and sodium from the food they serve.
- 7. The Agricultural Department recommends a maximum of 30 percent of calories from fat.
- 8. Answers will vary.
- 9. Answers will vary.
- 10. Answers will vary.

Q and A #6 (page 51)

- The Dominican Republic's Beata Island is located in the Caribbean Sea.
- 2. Beata is isolated because it takes 5 hours by boat to reach the island.
- 3. Answers will vary.
- 4. Answers will vary.
- 5. The Jaragua gecko measures 1.6 centimeters.
- The dark brown lizard has soft skin, a stout body, and suction pads on its feet.
- 7. Answers will vary.
- Scientists think the lizard eats small ants, spiders, and soil-dwelling mites.
- The lizard, known as *Sphaerodactylus ariasae*, was named after biologist Yvonne Arias.
- 10. Answers will vary.

Q and A #7 (page 53)

- Olowe of Ise produced wood carvings. He worked for kings of the Yoruba people.
- When the African sculptor was in his 20s, he was a messenger in the king's court.

- 3. It is not known how Olowe learned his woodcarving skill.
- 4. Answers will vary.
- It is difficult to prove that the artist carved by feel because there are so few written accounts of his work.
- 6. Answers will vary.
- 7. Olowe created figures, columns, and doors for African palaces.
- 8. Answers will vary.
- The curator of the one-man show is Roslyn A. Walker. Olowe's work was displayed at the National Museum of African Art in Washington, D.C.
- 10. Answers will vary.

Q and A #8 (page 55)

- 1. All kinds of bugs are on view at the Insectarium.
- 2. Answers will vary.
- 3. Kanya decided to open a museum after he noticed that children liked to look at his catches of dead creatures.
- In the Insectarium, dead insects are mounted (set for display) on the walls.
- The museum is showing off bugs that look like leaves and ornate (fancy) insects that are worn as jewelry.
- People touring the museum may touch dead bugs from Africa, Asia, and Australia.
- 7. Answers will vary.
- Millipedes are a vital (important) part of the ecosystem because they make space in dirt for plants to grow.
- 9. Answers will vary.
- 10. Answers will vary.

Q and A #9 (page 57)

- Post-it Notes are little pieces of paper with adhesive on the back.
 3M began selling them in 1980.
- Answers will vary.
- 3. The original Post-it Notes were square and came in bright yellow.
- 4. Fry used slips of paper to keep his place in the hymnbook, but the bookmarks kept falling out.
- Spencer's adhesive was unusual because it could be repositioned.
- 6. Answers will vary.
- After placing a note on a report intended for a fellow worker, Fry realized he had found a new way to send messages.
- 8. Answers will vary.
- 9. Answers will vary.
- The scientist is most pleased with the fact that so many people use and appreciate his invention.

Q and A #10 (page 59)

- Stalagmites are formed by the slow dripping of mineral water from the roof of a cave.
- 2. The stalagmites used in Polyak's research were taken from Carlsbad Caverns and two other caves.
- Scientists studied the cone-shaped columns of stone by cutting them into thin sections.
- 4. The rings of calcite remind Polyak of the growth rings found in trees.
- During the drier years, thin bands of calcite formed. During the wet years, thicker rings formed.
- 6. Answers will vary.
- 7. Answers will vary.
- The fact that the stalagmites have not grown for the past 700 years indicates the beginning of a dry period for New Mexico that continues to this day.
- 9. Answers will vary.
- About 1,000 years ago, the Pueblo made their homes in the mountains. Today they live in river valleys.

Q and A #11 (page 61)

- 1. The largest flower in the world bloomed in London's Kew Gardens.
- 2. Titan arum is 10 feet tall. It is found in the rain forests of Sumatra, Indonesia.
- 3. The last time the flower bloomed was in 1963.
- Austin and his friends wore masks because they expected the gigantic plant to have a very bad odor.
- 5. Boyce thinks that the scent of the flower is similar to rotting flesh or to a rubbish bin in the summer.
- 6. Answers will vary.
- 7. The aroma of the blossom attracts the sweat bee.
- A few days before the petals opened, the plant grew between four and six inches a day.
- 9. The flower is probably very beautiful because it is bell-shaped and deep red in color.
- 10. Answers will vary.

Q and A #12 (page 63)

- Researchers have discovered that dolphins are able to learn and repeat signals from their companions.
- Analysis of more than 1,700 whistle signals took place along the Moray Firth coast of Scotland.
- It takes just a few seconds for bottlenose dolphins to match each other's whistle.
- 4. Like dolphins, parrots have the ability to copy sounds.
- Before using a spoken language, it is believed ancient humans communicated with matching signals.