

A Million Whys Book 22: Science Quiz

The Energy Expedition, by Crafty Clover.

Name: _____ Date: _____ Score: _____ / 12

Fill in the missing number. Use the number bank.

Number bank: 27 30 50 90 100 200 400 600 1,000 1966 8,000 10,000

1. An old-style incandescent bulb gives off about _____ percent of its energy as heat, not light.
From: How Does Energy Change From One Form Into Another?
2. Galileo rolled balls down ramps about _____ years ago to study how things speed up.
From: Why Does a Ball Speed Up Faster on a Steeper Hill?
3. Deep inside the Sun, the temperature is about _____ million degrees Fahrenheit, and the pressure is enormous.
From: What Makes the Sun Give Off So Much Energy?
4. On a clear day at noon, sunlight delivers about _____ watts of power to every square meter facing it.
From: How Much Power Does Sunshine Bring to One Square Meter?
5. The surface of the Sun is about _____ degrees Fahrenheit, which is hot enough to glow yellow-white.
From: How Hot Is the Sun's Surface, and How Hot Is Its Core?
6. One gallon of gasoline holds about as much energy as a _____-watt bulb uses in two weeks.
From: Why Do Liquid Fuels Pack So Much Energy?
7. A big electric eel can make over _____ volts.
From: How Can an Eel's Body Make Electric Shocks?
8. One bar-tailed godwit flew more than _____ miles without stopping, fueled by stored fat.
From: Why Do Migrating Birds Eat So Much Before a Long Trip?
9. Today's biggest turbines are taller than a _____-story building, with blades longer than a jumbo jet's wingspan.
From: Why Do Wind Farms Put Their Turbines So High Up?
10. A tidal station in France has been making electricity since _____.
From: How Does a Tidal Power Station Use the Ocean?
11. A strong athlete can make _____ or more for a short time.
From: How Much Electricity Can You Make by Pedaling?
12. Washing machines have become far more efficient than ones from _____ years ago.
From: What Do Energy Star and EnerGuide Labels Tell Us?

Watch a short video answer for every question at xdme.com

Answer key

1. **90** (An old-style incandescent bulb gives off about 90 percent of its energy as heat, not light. Book 22, Question 12)
2. **400** (Galileo rolled balls down ramps about 400 years ago to study how things speed up. Book 22, Question 32)
3. **27** (Deep inside the Sun, the temperature is about 27 million degrees Fahrenheit, and the pressure is enormous. Book 22, Question 52)
4. **1,000** (On a clear day at noon, sunlight delivers about 1,000 watts of power to every square meter facing it. Book 22, Question 65)
5. **10,000** (The surface of the Sun is about 10,000 degrees Fahrenheit, which is hot enough to glow yellow-white. Book 22, Question 73)
6. **100** (One gallon of gasoline holds about as much energy as a 100-watt bulb uses in two weeks. Book 22, Question 92)
7. **600** (A big electric eel can make over 600 volts. Book 22, Question 97)
8. **8,000** (One bar-tailed godwit flew more than 8,000 miles without stopping, fueled by stored fat. Book 22, Question 99)
9. **50** (Today's biggest turbines are taller than a 50-story building, with blades longer than a jumbo jet's wingspan. Book 22, Question 107)
10. **1966** (A tidal station in France has been making electricity since 1966. Book 22, Question 109)
11. **200** (A strong athlete can make 200 or more for a short time. Book 22, Question 120)
12. **30** (Washing machines have become far more efficient than ones from 30 years ago. Book 22, Question 127)