

WHAT IS COAL MADE FROM?

- A. DEAD PLANTS
- B. DINOSAUR FOSSILS
- C. A WHOLE BUNCH OF CHEMICALS MIXED TOGETHER BY SCIENTISTS

WHAT PERCENTAGE OF THE ENERGY USED AROUND THE WORLD COMES FROM FOSSIL FUELS?

- A. NONE
- B. NEARLY 90%
- C. 40%

WHAT DOES THE WORD "PETROLEUM" MEAN?

- A. ROCK OIL
- B. ANCIENT SEA CREATURE
- C. SWAMP GAS

IF YOU LIVE IN EUROPE, HOW MUCH ENERGY DO YOU USE COMPARED TO A PERSON IN INDIA?

- A. ABOUT THE SAME
- B. TWICE AS MUCH
- C. FOURTEEN TIMES AS MUCH

THE WORD "PETROLEUM" MEANS

- A. ROCK OIL (PETRA + OLEUM)
- B. ANCIENT SEA CREATURE
- C. SWAMP GAS

IF YOU LIVE IN EUROPE,
COMPARED TO A PERSON IN INDIA
YOU USE

- A. ABOUT THE SAME
- B. TWICE AS MUCH
- C. FOURTEEN TIMES AS MUCH
ENERGY

COAL IS MADE FROM

- A. DEAD PLANTS
- B. DINOSAUR FOSSILS
- C. A WHOLE BUNCH OF
CHEMICALS MIXED TOGETHER
BY SCIENTISTS

ENERGY USED AROUND THE
WORLD COMES FROM FOSSIL FUELS
BY

- A. NONE
- B. NEARLY 90%
- C. 40%

WHICH OF THE FOLLOWING COUNTRIES HAD A 50% INCREASE IN SOLAR CELL PRODUCTION IN 2006?

- A. GERMANY
- B. SWEDEN
- C. USA
- D. JAPAN

WHICH INNOVATOR FIRST CREATED A DEVICE CAPABLE OF GENERATING ALTERNATING CURRENT (AC) ELECTRICITY?

- A. THOMAS EDISON
- B. NIKOLA TESLA
- C. BENJAMIN FRANKLIN
- D. MICHAEL PUPIN

HOW MUCH LESS ENERGY IS USED TO MAKE AN ALUMINUM CAN FROM RECYCLED CANS RATHER THAN FROM NEW MATERIALS?

- A. 35%
- B. 65%
- C. 75%
- D. 95%

WHICH COUNTRY CREATED A MULTI-MILLION DOLLAR PRIZE FOR ADVANCES IN WIND AND TIDAL ENERGY IN 2008?

- A. SCOTLAND
- B. SWEDEN
- C. SWITZERLAND
- D. SPAIN

TO MAKE AN ALUMINUM CAN
FROM RECYCLED CANS RATHER
THAN FROM NEW MATERIALS
USES

- A. 35%
- B. 65%
- C. 75%
- D. 95% LESS ENERGY

CREATED A £10-MILLION (16MIO \$)
PRIZE FOR ADVANCES IN WIND
AND TIDAL ENERGY IN 2008
A. SCOTLAND (SALTIRE PRIZE)

- B. SWEDEN
- C. SWITZERLAND
- D. SPAIN

50% INCREASE
IN SOLAR CELL PRODUCTION IN
2006 HAD

- A. GERMANY (RENEWABLE
ENERGY LAW)
- B. SWEDEN
- C. USA
- D. JAPAN

FIRST CREATED A DEVICE CAPABLE
OF GENERATING ALTERNATING
CURRENT (AC) ELECTRICITY

- B. NIKOLA TESLA
TESLA, BORN IN AUSTRIA-
HUNGARY IN 1856, EMIGRATED TO
THE US, WHERE HE SOLD THE
PATENT TO GEORGE WESTINGHOUSE.

ELECTRICAL ENERGY CAN BE PRODUCED FROM ...

- A. MECHANICAL ENERGY
- B. CHEMICAL ENERGY
- C. RADIANT ENERGY
- D. ALL OF THE ABOVE

BURNING OIL PRODUCES ...

- A. NITROGEN (N₂)
- B. OXYGEN (O₂)
- C. CARBON DIOXIDE (CO₂)
- D. OZONE (O₃)

MOST OF THE ENERGY WE USE ORIGINALLY CAME FROM ...

- A. THE SUN
- B. THE OZONE LAYER
- C. THE CENTER OF THE EARTH
- D. THE OCEANS

GLOBAL WARMING FOCUSES ON AN INCREASE IN THE LEVEL OF WHICH GAS IN THE ATMOSPHERE?

- A. OZONE (O₃)
- B. SULFUR DIOXIDE (SO₂)
- C. CARBON DIOXIDE (CO₂)
- D. NITROUS OXIDE (N₂O)

MOST OF THE ENERGY WE USE
ORIGINALLY CAME FROM ...

- A. THE SUN
- B. THE OZONE LAYER
- C. THE CENTER OF THE EARTH
- D. THE OCEANS

GLOBAL WARMING FOCUSES ON
AN INCREASE IN THE LEVEL IN THE
ATMOSPHERE OF

- A. OZONE (O₃)
- B. SULFUR DIOXIDE (SO₂)
- C. CARBON DIOXIDE (CO₂)
- D. NITROUS OXIDE (N₂O)

ELECTRICAL ENERGY CAN BE
PRODUCED FROM ...

- A. MECHANICAL ENERGY
- B. CHEMICAL ENERGY
- C. RADIANT ENERGY
- D. ALL OF THE ABOVE

BURNING OIL PRODUCES ...

- A. NITROGEN (N₂)
- B. OXYGEN (O₂)
- C. CARBON DIOXIDE (CO₂)
- D. OZONE (O₃)

RENEWABLE ENERGY SOURCES...

- A. ARE CONSTANTLY RE-PRODUCED BY NATURE
- B. PROTECT THE OZONE LAYER
- C. CAN BE EASILY TRANSMITTED OVER LONG DISTANCES
- D. DO NOT POLLUTE THE ENVIRONMENT

WHICH DO YOU THINK HAS THE MOST ENERGY?

- A. A HURRICANE
- B. A NUCLEAR BOMB
- C. ALL THE OCEANS' WAVES

SOLAR, BIOMASS, GEOTHERMAL, WIND, AND HYDROPOWER ENERGY ARE CALLED RENEWABLE BECAUSE THEY ...

- A. ARE CLEAN AND FREE TO USE
- B. CAN BE CONVERTED DIRECTLY INTO HEAT AND ELECTRICITY
- C. CAN BE REPLENISHED BY NATURE IN A SHORT PERIOD OF TIME
- D. DO NOT PRODUCE AIR POLLUTION

ELECTRICITY IS THE MOVEMENT OF ...

- A. ATOMS
- B. MOLECULES
- C. ELECTRONS
- D. NEUTRONS

SOLAR, BIOMASS, GEOTHERMAL, WIND,
AND HYDROPOWER ENERGY ARE
CALLED RENEWABLE BECAUSE THEY ...

- A. ARE CLEAN AND FREE TO USE
- B. CAN BE CONVERTED DIRECTLY INTO
HEAT AND ELECTRICITY
- C. CAN BE REPLENISHED BY NATURE IN
A SHORT PERIOD OF TIME
- D. DO NOT PRODUCE AIR POLLUTION

ELECTRICITY IS THE MOVEMENT
OF ...

- A. ATOMS
- B. MOLECULES
- C. ELECTRONS
- D. NEUTRONS

RENEWABLE ENERGY SOURCES...

- A. ARE CONSTANTLY RE-
PRODUCED BY NATURE
- B. PROTECT THE OZONE LAYER
- C. CAN BE EASILY TRANSMITTED
OVER LONG DISTANCES
- D. DO NOT POLLUTE THE
ENVIRONMENT

THE MOST ENERGY HAS

- A. A HURRICANE (10 TIMES B)
- B. A NUCLEAR BOMB (SAME AS C)
- C. ALL THE OCEANS' WAVES

WHEN WILL THE SUN STOP SHINING?

- A. NEVER
- B. IN A FEW BILLION YEARS
- C. NEXT WEEK ON TUESDAY

ONE KILOWATT-HOUR EQUALS ...

- A. 10 KILOVOLTS
- B. 1000000 CALORIES
- C. 100 CELSIUS
- D. 1000 WATT-HOURS

HOW MUCH ENERGY DO YOU THINK A BOLT OF LIGHTNING HAS?

- A. ENOUGH TO TOAST 160,000 SLICES OF BREAD
- B. ENOUGH TO TOAST ONE LOAF OF BREAD
- C. ENOUGH TO TOAST ONE SLICE OF BREAD

A 100-WATT LIGHT BULB CONSUMES HOW MUCH ENERGY IN 24 HOURS?

- A. 24 CALORIES
- B. 2.4 KILOWATT-HOURS
- C. 240 ELECTRON-VOLT
- D. 2400 JOULES

HOW MUCH ENERGY DO YOU
THINK A BOLT OF LIGHTNING HAS?

- A. ENOUGH TO TOAST 160,000
SLICES OF BREAD
- B. ENOUGH TO TOAST ONE LOAF OF
BREAD
- C. ENOUGH TO TOAST ONE SLICE OF
BREAD

IN 24 HOURS A 100-WATT LIGHT
BULB CONSUMES

- A. 24 CALORIES
- B. 2.4 KILOWATT-HOURS
- C. 240 ELECTRON-VOLT
- D. 2400 JOULES

THE SUN WILL STOP SHINING

- A. NEVER
- B. IN A FEW BILLION YEARS
- C. NEXT WEEK ON TUESDAY

ONE KILOWATT-HOUR EQUALS ...

- A. 10 KILOVOLTS
- B. 1000000 CALORIES
- C. 100 CELSIUS
- D. 1000 WATT-HOURS

THIS SOURCE OF RENEWABLE ENERGY IS NOT WEATHER DEPENDENT

- A. HYDROPOWER
- B. WIND
- C. GEOTHERMAL
- D. SOLAR

CELL PHONE BATTERIES CONVERT ... ENERGY INTO ELECTRICITY

- A. NUCLEAR
- B. CHEMICAL
- C. GRAVITATIONAL
- D. KINETIC

THE EARTH GETS ... SOLAR ENERGY TO MEET ALL OF OUR ENERGY NEEDS

- A. JUST ENOUGH
- B. 50 TIMES LESS THAN ENOUGH
- C. NOT ENOUGH
- D. 1000 TIMES MORE THAN ENOUGH

GREEN PLANTS CONVERT SOLAR ENERGY INTO ...

- A. HYDROGEN
- B. URANIUM
- C. CHEMICAL ENERGY
- D. X-RAYS

THE EARTH GETS ... SOLAR ENERGY
TO MEET ALL OF OUR ENERGY
NEEDS

- A. JUST ENOUGH
- B. 50 TIMES LESS THAN ENOUGH
- C. NOT ENOUGH
- D. 1000 TIMES MORE THAN
ENOUGH

GREEN PLANTS CONVERT SOLAR
ENERGY INTO ...

- A. HYDROGEN
- B. URANIUM
- C. CHEMICAL ENERGY
- D. X-RAYS

THIS SOURCE OF RENEWABLE
ENERGY IS NOT WEATHER
DEPENDENT

- A. HYDROPOWER
- B. WIND
- C. GEOTHERMAL
- D. SOLAR

CELL PHONE BATTERIES CONVERT ...
ENERGY INTO ELECTRICITY

- A. NUCLEAR
- B. CHEMICAL
- C. GRAVITATIONAL
- D. KINETIC

A FLYWHEEL STORES ... ENERGY

- A. POTENTIAL
- B. KINETIC
- C. CHEMICAL
- D. ELECTRICAL

HOW MANY TIMES THE HEAT ENERGY STORED IN THE UPPERMOST 10KM OF THE EARTH'S CRUST IS EQUIVALENT TO THE ENERGY STORED IN ALL OIL AND GAS?

- A. 50,000 TIMES
- B. 500 TIMES
- C. 5 TIMES
- D. 0.5 TIMES

GEYSERS ARE EXAMPLES OF ... ENERGY

- A. SOLAR
- B. WIND
- C. TIDAL
- D. GEOTHERMAL

WHAT ENERGY SOURCE DOES THE SUN USE?

- A. THERMAL
- B. FUSION
- C. BIOMASS
- D. LIGHT

GEYSERS ARE EXAMPLES OF

- A. SOLAR
- B. WIND
- C. TIDAL
- D. GEOTHERMAL
ENERGY

THE SUN USES AS ENERGY SOURCE

- A. THERMAL
- B. NUCLEAR FUSION
- C. BIOMASS
- D. LIGHT
HYDROGEN INTO HELIUM

A FLYWHEEL STORES

- A. POTENTIAL
- B. KINETIC
- C. CHEMICAL
- D. ELECTRICAL
ENERGY

THE HEAT ENERGY STORED IN THE
UPPERMOST
10KM OF THE EARTH'S CRUST IS
EQUIVALENT TO

- A. 50,000 TIMES
THE ENERGY STORED IN ALL OIL
AND GAS

CAN YOU GUESS WHAT SOME FARMERS NEAR THETFORD, NORFOLK, ARE DOING WITH CHICKEN POO?

- A. SELLING IT TO A POWER STATION
- B. EATING IT
- C. BURYING IT

WHAT IS THE SUN MOSTLY MADE OF?

- A. WATER
- B. HYDROGEN
- C. IRON

THE AMOUNT OF SOLAR ENERGY REACHING THE EARTH IN ONE HOUR IS EQUIVALENT TO THE WORLD'S ELECTRICITY NEEDS FOR...?

- A. A DECADE
- B. A YEAR
- C. A MONTH
- D. FOR A DAY

WHAT DO WE CALL THE BLACK SPOTS ON THE SURFACE OF THE SUN?

- A. SUNSPOTS
- B. TURBULENCES
- C. ERUPTIONS

THE AMOUNT OF SOLAR ENERGY REACHING THE EARTH IN ONE HOUR IS EQUIVALENT TO THE WORLD'S ELECTRICITY NEEDS FOR...?

- A. A DECADE
- B. A YEAR
- C. A MONTH
- D. FOR A DAY

WHAT DO WE CALL THE BLACK SPOTS ON THE SURFACE OF THE SUN?

- A. SUNSPOTS
- B. TURBULENCES
- C. ERUPTIONS

CAN YOU GUESS WHAT SOME FARMERS NEAR THETFORD, NORFOLK, ARE DOING WITH CHICKEN POO?

- A. SELLING IT TO A POWER STATION
- B. EATING IT
- C. BURYING IT

WHAT IS THE SUN MOSTLY MADE OF?

- A. WATER
- B. 73.5% HYDROGEN, 25% HELIUM
- C. IRON

HOW OLD IS THE SUN?

- A. 365 DAYS
- B. 4.57 BILLION YEARS
- C. 10.2 BILLION YEARS

HOW MANY TIMES DOES THE EARTH
FIT INTO THE SUN?

- A. 3'000 TIMES
- B. 13'000 TIMES
- C. 1'300'000 (1.3 MILLION) TIMES

THE DISTANCE BETWEEN EARTH
AND SUN IS ABOUT 150'000'000
KM. HOW LONG DOES LIGHT
TRAVEL TO COVER THIS DISTANCE?

- A. ~ 1 SECOND
- B. ~ 8 MINUTES
- C. EXACTLY 24 HOURS

HOW HOT IS THE SURFACE OF THE
SUN?

- A. 600°C
- B. 6'000°C
- C. 10'000°C

THE DISTANCE BETWEEN EARTH AND SUN IS ABOUT 150'000'000 KM. HOW LONG DOES LIGHT TRAVEL TO COVER THIS DISTANCE?

- A. ~ 1 SECOND
- B. 8 MINUTES AND 19 SECONDS
- C. EXACTLY 24 HOURS

HOW HOT IS THE SURFACE OF THE SUN?

- A. 600°C
- B. 6'000°C
- C. 10'000°C

HOW OLD IS THE SUN?

- A. 365 DAYS
- B. 4.57 BILLION YEARS
- C. 10.2 BILLION YEARS

HOW MANY TIMES DOES THE EARTH FIT INTO THE SUN?

- A. 3'000 TIMES
- B. 13'000 TIMES
- C. 1'300'000 (1.3 MILLION) TIMES

HOW MANY 60 WATT LIGHT BULBS
ARE NECESSARY TO REACH THE
BRIGHTNESS OF THE SUN?

- A. 6'410 PIECES
- B. 6.41 MILLION PIECES (6'410'000)
- C. 6.41 SEPTILLION PIECES
6'410'000'000'000'000'000'000'000

WHAT IS THE NAME OF THE
OUTERMOST VISIBLE LAYER OF THE
SUN FROM WHICH THE RAYS OF
THE SUN ORIGINATE?

- A. PHOTOSPHERE
- B. ATMOSPHERE
- C. PHOTOGRAPHY

QUESTION 3

- A. FIRST
- B. SECOND
- C. THIRD

QUESTION 4

- A. FIRST
- B. SECOND
- C. THIRD

ANSWER 3

- A. FIRST
- B. SECOND
- C. THIRD

ANSWER 4

- A. FIRST
- B. SECOND
- C. THIRD

HOW MANY 60 WATT LIGHT BULBS
ARE NECESSARY TO REACH THE
BRIGHTNESS OF THE SUN?

- A. 6'410 PIECES
- B. 6.41 MILLION PIECES (6'410'000)
- C. 6.41 SEPTILLION PIECES
6'410'000'000'000'000'000'000'000

WHAT IS THE NAME OF THE
OUTERMOST VISIBLE LAYER OF THE
SUN FROM WHICH THE RAYS OF
THE SUN ORIGINATE?

- A. PHOTOSPHERE
- B. ATMOSPHERE
- C. PHOTOGRAPHY