

Choose the correct answer.

1 Anyone who wants to become an engineer should study ... and physics.

- a. **A** biology
- b. **B** chemistry
- c. **C** mathematics

2 The university offers studies in many different ... focused mainly on the sciences.

- a. **A** disciplines
- b. **B** designs
- c. **C** technologies

3 One task that engineers commonly undertake is ... complex machines to make sure they are functioning properly.

- a. **A** designing
- b. **B** developing
- c. **C** inspecting

4 Most stadiums are built in the shape of a(n)

- a. **A** prism
- b. **B** cylinder
- c. **C** oval

5 ... help to support arches while adding style to buildings.

- a. **A** Columns
- b. **B** Vaults
- c. **C** Ellipses

6 A ... has four sides that are equal in length.

- a. **A** rectangle
- b. **B** square
- c. **C** prism

7 The Martins had their builder use ... so that they wouldn't have to deal with rust.

- a. **A** stainless steel
- b. **B** cement
- c. **C** porcelain

8 The ... that Maggie bought to build a new wooden fence wasn't very expensive.

- a. **A** concrete
- b. **B** lumber
- c. **C** tiles

9 ... glass is one of the strongest types of glass you can buy.

- a. **A** Reinforced
- b. **B** Standard
- c. **C** Coated

10 Use a ... to hold these two pieces of wood together while you cut them.

- a. **A** soldering iron
- b. **B** vise
- c. **C** drill

11 I'll need a ... in order to remove the screws from the doorknob.

- a. **A** drill
- b. **B** solder
- c. **C** screwdriver

12 John ... the wires before applying solder to them.

- a. **A** fused
- b. **B** stripped
- c. **C** removed

13 A moving object transfers its ... energy to a non-moving object on impact.

- a. **A** potential
- b. **B** work
- c. **C** kinetic

14 Stretching seatbelts ... the passenger's stopping distance in the event of a crash.

- a. **A** increase
- b. **B** transfer
- c. **C** decrease

15 A short stopping distance causes a lot of ... to be exerted on passengers in a crash.

- a. **A** force
- b. **B** work
- c. **C** brakes

16 A ... provides support to levers and allows them to pivot.

- a. **A** wedge
- b. **B** fulcrum
- c. **C** pulley

17 ... are especially important for providing wheelchair access to buildings.

- a. **A** Pulleys
- b. **B** Inclined planes
- c. **C** Wheel and axles

18 People often use ... to help them split firewood.

- a. **A** screws
- b. **B** loads
- c. **C** wedges

19 Another way of saying five to the third power is five

- a. **A** squared

- b. **B** percent
- c. **C** cubed

20 Five hundredths expressed as a figure is

- a. **A** 0.5
- b. **B** 0.05
- c. **C** 0.005

21 One half is another way of saying fifty

- a. **A** thousandths
- b. **B** exponents
- c. **C** percent

22 People who use imperial measurements measure height in

- a. **A** feet
- b. **B** liters
- c. **C** meters

23 Three hundred and fifty centimeters is equal to 3.5

- a. **A** meters
- b. **B** feet
- c. **C** inches

24 The metric system equivalent to pounds is

- a. **A** liters
- b. **B** gallons
- c. **C** kilograms

25 My ... as to why your car keeps overheating is that it is leaking coolant fluid.

- a. **A** observation
- b. **B** hypothesis
- c. **C** procedure

26 Windows that aren't properly sealed ... heat quickly.

- a. **A** dissipate
- b. **B** control
- c. **C** analyze

27 Make sure to record all of your ... while you are conducting the experiment.

- a. **A** results
- b. **B** methodology
- c. **C** data

28 Our ... is to soak each piece of fabric in water and then to record how long each one takes to dry.

- a. **A** procedure
- b. **B** hypothesis
- c. **C** variable

29 Smoking is ... on most commercial flights.

- a. **A** precaution
- b. **B** accident
- c. **C** prohibited

30 You should wear ... to protect your eyes while you're working.

- a. **A** gloves
- b. **B** goggles
- c. **C** first aid

31 If you don't take the proper precautions you can have a serious

- a. **A** accident
- b. **B** shock
- c. **C** hazard

32 Places with a high level of poverty often lack a proper ..., which can lead to the spreading of many diseases.

- a. **A** road construction
- b. **B** civil engineer
- c. **C** water supply

33 The population of the city has increased so quickly and dramatically that the existing ... can no longer support it.

- a. **A** infrastructure
- b. **B** land development
- c. **C** construction

34 The next major ... project that our city is planning is the new stadium.

- a. **A** municipal
- b. **B** residential
- c. **C** commercial

35 We'll need to make a ... model of the city in order to show the city council members where the park will be built.

- a. **A** municipal
- b. **B** construction
- c. **C** topographical

36 Biodiesel is an example of a(n) ... fuel.

- a. **A** chemical
- b. **B** fossil
- c. **C** alternative

37 The majority of the world's energy comes from

- a. **A** diesel
- b. **B** fossil fuels
- c. **C** plants

38 Fuel that comes from petroleum is

- a. **A** toxic
- b. **B** biodiesel
- c. **C** renewable

39 This community collects ... waste, such as food scraps and plant materials, and uses it to produce compost for the garden in the park.

- a. **A** biodegradable
- b. **B** toxic
- c. **C** fuel

40 The engineers built a virtual model of the new system using

- a. **A** CFD
- b. **B** CAM
- c. **C** CAD

41 Many houses in this neighborhood contain ... in the form of water heaters.

- a. **A** prototypes
- b. **B** pressure vessels
- c. **C** CAMs

42 The machine stopped working due to one broken

- a. **A** simulation
- b. **B** stress
- c. **C** mechanism

43 We'll need to build a ... so that we can work on refining the design.

- a. **A** prototype
- b. **B** pressure vessel
- c. **C** CFD

44 A computer's ... is responsible for taking the appropriate amount of electricity from the electrical outlet.

- a. **A** integrated circuit
- b. **B** power supply
- c. **C** circuit card assembly

45 This particular power tool requires an input voltage of 120

- a. **A** volts
- b. **B** watts
- c. **C** circuits

46 A computer's main ... is the motherboard.

- a. **A** circuit
- b. **B** output voltage
- c. **C** component

47 Our company has a ... agreement with a company in India to produce some of our equipment.

- a. **A** thrust
- b. **B** licensed production
- c. **C** flyaway value

48 In order for a plane to fly, the ... must be greater than the drag.

- a. **A** launch
- b. **B** ramjets
- c. **C** thrust

49 The cruising ... of this aircraft is 567 mph.

- a. **A** velocity
- b. **B** propellant
- c. **C** launch

50 The ... of the new fighter jet is 7,000 pounds.

- a. **A** flyaway value
- b. **B** internal fuel capacity
- c. **C** velocity