



Science Picture Quiz 5th and 6th Grade Division IAC Nationals 2026

Instructions – Mark your answers on the scantron provided. Correct answers are worth 2 points. Incorrect answers are worth –1 point. Questions left blank are worth 0 points. Write the answer to your tiebreaker question in the box at the top of your scantron.

1. What part of the plant cell is shown in this image in grey and marked 4?

- A. vacuole
- B. Golgi body
- C. cell wall
- D. peroxisome

2. What human organ is shown in orange on this image?

- A. lungs
- B. liver
- C. gall bladder
- D. kidneys

3. Seeds like the one shown here are designed to be spread in which of these ways?

- A. in the fur and feathers of animals
- B. by the wind
- C. by bees
- D. being carried away by water

4. Which of the following, shown here, was the first person to walk on the moon in 1969?

- A. Michael Collins
- B. Eugene Cernan
- C. John Glenn
- D. Neil Armstrong

5. What element with atomic number 16 is a yellow, crystalline solid at room temperature?

- A. lithium
- B. sulfur
- C. aluminum
- D. sodium

6. Which of the following is a French chemist and microbiologist who names a method for purifying milk?

- A. Antoine Lavoisier
- B. Robert Koch
- C. Louis Pasteur
- D. Pierre Curie

7. This microscopic image shows what component of human blood?

- A. red blood cells
- B. white blood cells
- C. platelets
- D. plasma

8. This artificial satellite, named after astronomer Edwin Hubble and launched in 1990, was designed for which of the following?

- A. as a space station for astronauts to live on
- B. to transport cargo to the moon
- C. as a space telescope to observe distant objects
- D. to spy on Russia and other nations

9. What is the name given to sand dunes like this one that experience shifting wind patterns from multiple directions?

- A. barchan
- B. parabolic
- C. transverse
- D. star

10. What is the term for an animal like this katydid evolving to resemble another organism?

- A. mimicry
- B. thanatosis
- C. schooling
- D. commensalism

11. Which of the following can grow from mycelium like the one shown here?

- A. a tree
- B. a fern
- C. mushrooms
- D. moss

12. The fossil named 'Sue' at the Field Museum in Chicago is one of the best examples of what dinosaur?

- A. brachiosaurus
- B. tyrannosaurus rex
- C. archaeopteryx
- D. pterodactyl

13. Which fraction is used when calculating the volume of a sphere like the one shown in the image?

- A. $1/2$
- B. $2/3$
- C. $3/4$
- D. $4/3$

14. In early programmable computers, punched cards like the ones shown here served the same function as which of these in modern computers?

- A. mouse
- B. processor
- C. cooling fan
- D. RAM or a hard drive

15. The Crab Nebula, shown here, is a remnant of an exploding star known by which of these terms?

- A. supernova
- B. white dwarf
- C. neutron star
- D. black hole

16. Small finger-like projections called villi line the inside of what organ in humans?

- A. small intestine
- B. heart
- C. bladder
- D. appendix

17. J. Robert Oppenheimer, shown here, was the director of the Los Alamos Laboratory during World War II and as a result is known as the 'father' of which of these?

- A. jet aircraft
- B. the space program
- C. the personal computer
- D. the atomic bomb

18. This photograph, known as 'Earthset', was taken by astronaut Christina Koch on what April 2026 mission?

- A. Expedition 59
- B. STS-34
- C. Artemis II
- D. Gemini VIII

19. What type of simple volcano, made from material piling up around a crater in a namesake shape, is shown in this image?

- A. shield
- B. cone
- C. field
- D. pancake

20. The regular icosahedron shown here has how many equilateral triangles as its faces?

- A. 20
- B. 15
- C. 12
- D. 10

21. In addition to lift and weight, what other two forces help determine whether or not a plane will fly and how quickly it will move?

- A. torque and spin
- B. buoyancy and displacement
- C. viscosity and moment
- D. thrust and drag

22. The organized thunderstorms on the outside of a hurricane that produce heavy winds and rainfall are known by what name?

- A. squall line
- B. shear area
- C. eye
- D. feeder bands

23. The model of the universe proposed by Copernicus placed which of these at the center?

- A. Earth
- B. Mars
- C. the Sun
- D. Venus

24. Gallium is an example of a metal that easily forms what type of highly ordered solid?

- A. crystal
- B. amorphous
- C. chaotic
- D. marbled

25. The inner core, shown at number 1 on the diagram, is mostly composed of which of these pairs of elements?

- A. copper and tin
- B. iron and nickel
- C. lithium and mercury
- D. uranium and plutonium

26. Which largest of the great apes is shown in this image?

- A. bonobo
- B. chimpanzee
- C. orangutan
- D. gorilla

27. Which of the following is part of the primary diet of termites, making them especially problematic for humans in some areas?

- A. living plants
- B. wood products
- C. livestock like cows
- D. metal

28. This tulip has three petals and three of what modified leaves that often resemble petals?

- A. stamen
- B. pistil
- C. sepal
- D. filament

29. What organelle, made up of smooth and rough subunits, is shown here?

- A. vesicle
- B. endoplasmic reticulum
- C. centrosome
- D. lysosome

30. What staple crop, originally domesticated by indigenous people in Mexico, is shown growing in this image?

- A. corn
- B. wheat
- C. rye
- D. barley

31. The galaxy shown here is which of the following types?

- A. elliptical
- B. irregular
- C. spiral
- D. lenticular

32. The yellow animal pictured here is a member of the phylum Porifera, and is commonly known as which of these?

- A. sea sponge
- B. coral
- C. anemone
- D. sea cucumber

33. The koala pictured here belongs to the same class of mammals as which other animal?

- A. panda
- B. racoon
- C. kangaroo
- D. fox

34. The peppered moth, shown here, famously developed a darker color during the industrial revolution due to which of these?

- A. new bird species coming to England
- B. people planting different trees
- C. pollution from factories
- D. a lack of appropriate places to lay eggs

35. Old Faithful, one of the most famous sites in Yellowstone National Park, is what type of natural phenomenon?

- A. whirlpool
- B. geyser
- C. cryovolcano
- D. mudpot

36. What type of precipitation, often causing damage to property when it occurs, is shown in this image?

- A. snow
- B. sleet
- C. graupel
- D. hail

37. Due to their varied diet, bears like the one shown here are classified as which of the following?

- A. locavores
- B. omnivores
- C. herbivores
- D. carnivores

38. Rosalind Franklin was instrumental in determining that which of these was the correct structure of DNA?

- A. triple helix
- B. double helix
- C. single stranded
- D. rod-shaped

39. In humans and other mammals, relatively long, pointed teeth are known by what name?

- A. incisors
- B. canines
- C. premolars
- D. molars

40. Graphite, like the specimen shown here, will turn into which of the following if exposed to extremely high temperature and pressure?

- A. coal
- B. mercury
- C. diamond
- D. steel

41. The atoms in this image show what type of bond that involves sharing electrons?

- A. ionic
- B. metallic
- C. covalent
- D. dipole

42. What smallest planet in the Solar System is seen in this photo?

- A. Mercury
- B. Venus
- C. Neptune
- D. Uranus

43. The main diet of the giant panda seen here is which of these fast-growing plants?

- A. eucalyptus
- B. cactus
- C. mangrove
- D. bamboo

44. Which of these other animals also uses echolocation like the bat seen here?
- A. eagles
 - B. mice
 - C. whales
 - D. squid
45. The largest part of the human brain is called which of the following?
- A. cerebrum
 - B. corpus callosum
 - C. brain stem
 - D. cerebellum
46. The blue pigment seen here is made by mixing aluminum oxide with an oxide of what other metallic element?
- A. silver
 - B. cobalt
 - C. gold
 - D. platinum
47. Despite its name, a seahorse is most closely related to which of these?
- A. lionfish
 - B. starfish
 - C. whale
 - D. anemone
48. Scientist Rachel Carson's book *Silent Spring* helped launch which of these in the mid-20th century?
- A. the US space program
 - B. new engineering safety regulations in the US
 - C. a push for science education for girls
 - D. the modern environmental movement
49. Cooling towers like these are most associated with what type of power plants?
- A. natural gas
 - B. nuclear
 - C. hydroelectric
 - D. solar
50. The Golden Record seen here was included on what space probe launched in 1977, which has traveled over 16 billion miles into space as of 2026?
- A. Pioneer 10
 - B. Cassini
 - C. Voyager 1
 - D. Discovery
51. Alveoli, shown in this image, are a major component of what system of the human body?
- A. nervous
 - B. integumentary
 - C. excretory
 - D. respiratory
52. American alligators like the one seen here would be most likely to live in the wild in which of these states?
- A. Alabama
 - B. Oklahoma
 - C. Idaho
 - D. Minnesota
53. The *Brookesia nana*, seen here perched on a person's fingertip, is the smallest species of what color-changing lizard?
- A. horned frog
 - B. axolotl
 - C. chameleon
 - D. skink
54. Darker areas on the sun, like those seen here, are known as which of these?
- A. sunspots
 - B. magnetic storms
 - C. solar rays
 - D. auroras
55. Which of these was the name of the first US space station, seen here, that was launched in the early 1970s?
- A. Soyuz
 - B. Mir
 - C. Skylab
 - D. Saturn V
56. According to the National Weather Service, a tornado that forms over water is known as which of the following?
- A. cyclone
 - B. waterspout
 - C. whirlpool
 - D. tropical depression
57. What is the name for the white part of the eye seen in this photo?
- A. pupil
 - B. sclera
 - C. iris
 - D. orbit
58. Which of these is NOT a disease spread by mosquitoes?
- A. malaria
 - B. yellow fever
 - C. chicken pox
 - D. West Nile virus
59. This image shows a simple diagram of what common compound?
- A. sodium chloride
 - B. hydrochloric acid
 - C. sodium hydroxide
 - D. hydrogen peroxide

60. Airships like the Hindenburg, seen here, formerly used what highly flammable gas instead of helium?

- A. nitrogen
- B. neon
- C. argon
- D. hydrogen

Tiebreaker

This question will only be scored if there is a tie for placement on the exam. **This is a required question, but there is no penalty for a wrong answer to this question.**

Write your answer legibly in the space provided on your scantron.

According to the most recent figures, what is the total number of pet dogs owned by Americans?