PSIA
Private Schools Interscholastic Association

Maps, Graphs, & Charts
STATE Contest
Grades 4/5
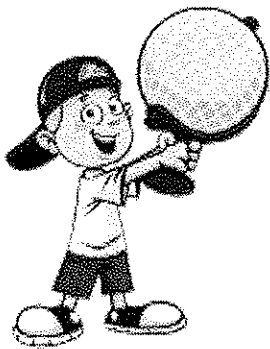
2019

Score:_____

(Please do not open test until the signal is given to begin.)

Atlas Questions – United States – The following questions are about the United States.

1. Which of the following cities is directly west of Lake Okeechobee?
   A. Port St. Lucie
   B. Miami
   C. Jacksonville
   D. Cape Coral

2. How many states border the Great Lakes?
   A. 6
   B. 7
   C. 8
   D. 9

3. What is the population density of Alaska?
   A. 0 to 5 people per square mile
   B. 5 to 50 people per square mile
   C. 50 to 100 people per square mile
   D. 100 to 250 people per square mile

4. Humphrey's Peak is just north of the campus of Northern Arizona University. How tall is this peak?
   A. 3445 meters
   B. 3851 meters
   C. 11301 meters
   D. 12633 meters

5. What river runs through Mammoth Cave National Park?
   A. Yellow River
   B. Green River
   C. Red River
   D. Blue River

6. Which use of consumed energy is highest in the U.S.?
   A. residential
   B. commercial
   C. industrial
   D. transportation

7. Ohio is the _____ largest producer of U.S. gross domestic product.
   A. 4th
   B. 5th
   C. 6th
   D. 7th

8. Most of the land in New Mexico is used for what purpose?
   A. ranching or herding
   B. forestry
   C. commercial farming
   D. no use

9. Which of the following states can expect cool summers, but occasional flooding from hurricanes coming onshore?
   A. Maine
   B. Pennsylvania
   C. North Carolina
   D. Michigan

10. What Pennsylvania city shares its name with the Great Lake that it sits on?
    A. Ontario
    B. Erie
    C. Huron
    D. Pittsburgh

Table – Use the table to answer the following questions.

Painting	Year painted	Artist	Years Alive	Current Location of Painting
Monalisa	1503-1506	Da Vinci	1452-1519	Louvre, Paris
School of Athens	1509-1511	Raphael	1483-1520	Apostolic Palace, Vatican City
Night Watch	1642	Rembrandt	1606-1669	Amsterdam Museum
Girl with a Pearl Earring	1665	Vermeer	1632-1675	Mauritshuis, The Hague
Guernica	1937	Picasso	1881-1973	Museo Reina Sofia, Madrid
Starry Night	1889	Van Gogh	1853-1890	Museum of Modern Art, New York City
The Scream	1893	Munch	1863-1944	National Gallery, Oslo
American Gothic	1930	Wood	1891-1942	Art Institute of Chicago

11. Which painting was created the latest in the 19th century?
    A. Guernica   B. Starry Night
    C. The Scream   D. American Gothic

12. How many years passed between Vermeer painting Girl with a Pearl Earring and his death?
    A. 2 years   B. 10 years
    C. 27 years   D. 33 years

13. What is the title of the painting that currently hangs in Spain?
    A. The Scream   B. Monalisa
    C. Guernica   D. School of Athens

14. Which painting was created 247 years before Starry Night?
    A. Night Watch   B. Monalisa
    C. School of Athens   D. Girl with a Pearl Earring

15. How old was the artist whose painting (from the list above) hangs in the National Gallery of Norway when it was painted?
    A. 56 years old   B. 36 years old
    C. 39 years old   D. 30 years old

16. How many of the paintings listed in the table hang in the Western Hemisphere?
    A. 2   B. 3
    C. 4   D. 5

Tornado Chart – Use the tornado chart to answer the following questions.

Labor Indicators in France, 2016
by percentage of population, by gender

▦ Male   ■ Female

10.2	Unemployed	9.8
65.8	Services	89.2
30.2	Industry	9.2
4	Ag	1.6

100 75 50 25 0   0 25 50 75 100
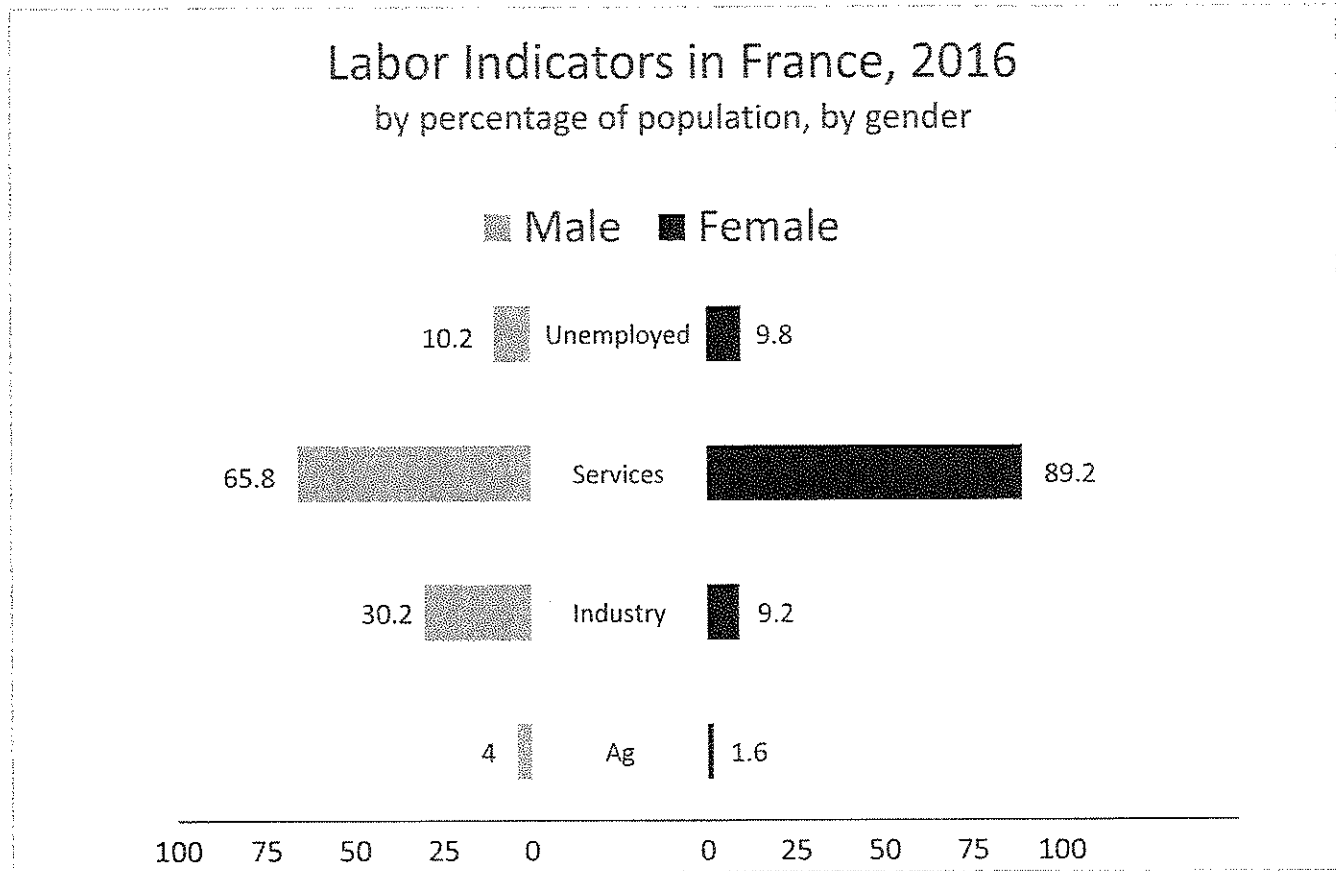
17.   What percent of women in France are unemployed?
- **A.**   9.8%
- **B.**   89.2%
- **C.**   10.2%
- **D.**   4%

18.   What percent of French men work in the services profession?
- **A.**   9.2%
- **B.**   89.2%
- **C.**   30.2%
- **D.**   65.8%

19.   France had a population of approximately 66 million people in 2016. Assuming half of the population were female, approximately how many women were employed in the services profession?
- **A.**   23 million
- **B.**   26 million
- **C.**   29 million
- **D.**   32 million

20.   Which statement is true?
- **A.**   Approximately 2.5 times as many men were unemployed as worked in agriculture.
- **B.**   Approximately 0.6 times as many women were unemployed as worked in industry.
- **C.**   Approximately twice as many women worked in agriculture than men.
- **D.**   Approximately twice as many men worked in industry as women.

Bar Graph with Secondary Axis – Use the following bar graph with a secondary axis to answer the following questions.
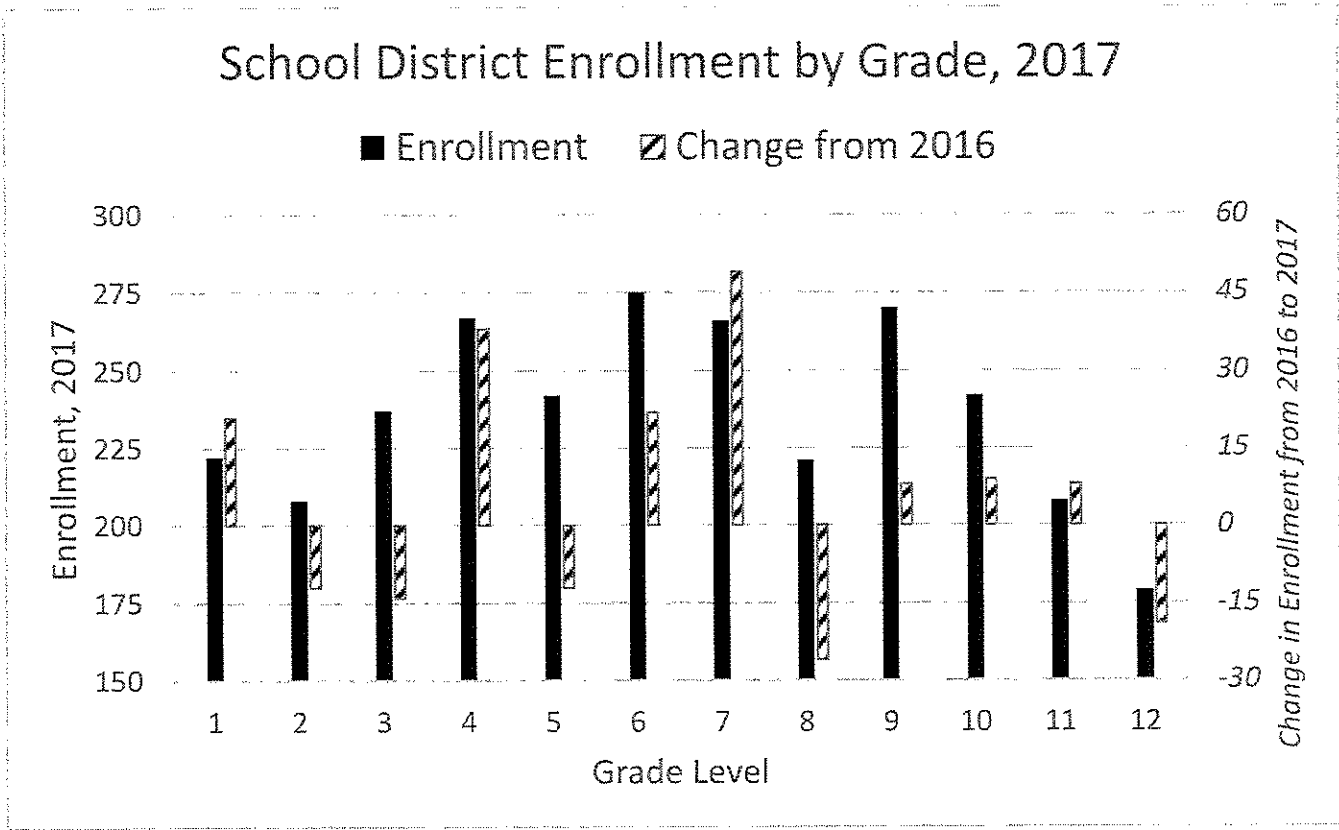
21.   What was the school district enrollment in 6th grade in 2017?
       A.   275   B.   250
       C.   263   D.   243

22.   Which grade had the lowest enrollment in 2017?
       A.   8th grade   B.   12th grade
       C.   11th grade   D.   2nd grade

23.   Assuming the elementary school contains grades 1 through 4, what was the total enrollment in elementary school?
       A.   1066   B.   765
       C.   1220   D.   934

24.   What was the enrollment in 8th grade in the district in 2016?
       A.   247   B.   221
       C.   196   D.   288

25.   How many grade levels had a larger enrollment in 2017 than in 2016?
   A.   7   B.   6
       C.   8   D.   4

26.   How many grade levels had fewer than 200 students in 2017?
     A.   0   **B.**   1
     C.   2   **D.**   3

27.   Which grade level had over 250 students in 2017 and grew by 15 to 30 students from last year?
     A.   1st grade   **B.**   7th grade
   **C.**   6th grade   **D.**   4th grade

28.   A student makes the following comment: "The solid bar representing 12th grade is half the size of the solid bar representing 8th grade. Therefore, the enrollment in 12th grade in 2017 is half the enrollment in 8th grade." What is wrong with this statement?
     A.   The student should have phrased the statement in terms of "double" instead of "half."
     B.   The secondary axis and striped bars should be used for information about ratio of sizes instead of the primary axis and solid bars.
     C.   The solid bars do not give information about enrollment in 2017.
     D.   Since the primary axis starts at 150 instead of 0, you cannot determine the ratio of sizes from the lengths of the bars.

Pie Charts – Use the following pie charts to answer the following questions. The charts give the percentages of customers who chose certain flavors of ice cream at each shop.
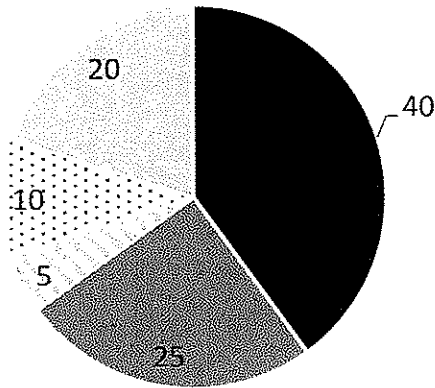
Vic's Cones and More   Hayleigh's Ice Cream Stand
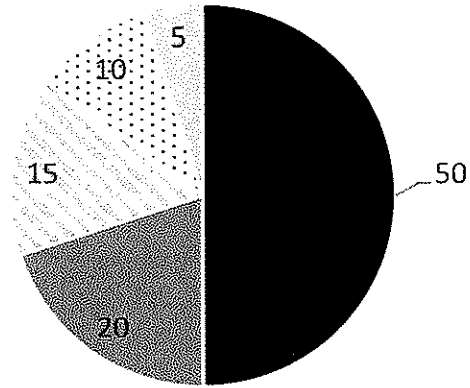
■ Vanilla ▨ Chocolate ⠂ Strawberry ⠿ Rocky Road ⠂ Banana

29.   What percent of customers chose strawberry ice cream at Hayleigh's Ice Cream Stand?
     A.   25%   **B.**   20%
     C.   15%   **D.**   5%

30. What percent more customers enjoyed vanilla ice cream than rocky road at Vic's Cones and More?

   A. 40%   B. 30%
   C. 20%   D. 15%

31. One-fourth of the customers at Vic's Cones and More ordered what flavor of ice cream?
   A. chocolate   B. vanilla
   C. banana   D. rocky road

32. Which flavors are preferred by a larger portion of customers at Hayleigh's than at Vic's?
   A. chocolate and banana   B. vanilla and strawberry
   C. vanilla, chocolate, and banana   D. vanilla, strawberry, and rocky road

33. Suppose Hayleigh had 400 orders one day. How many total orders for rocky road and strawberry were there?
   A. 50   B. 120
   C. 80   D. 100

34. Suppose Vic had 300 orders one day and 500 orders the next day. The percentages of flavors ordered were the same. How many more orders of vanilla did he serve on the second day?
   A. 60   B. 80
   C. 100   D. 120

35. Suppose Hayleigh served 20 servings of banana one day. How many servings of strawberry did she serve?
   A. 100   B. 80
   C. 60   D. 40

Atlas Question – Europe – Use the atlas to answer the following questions about Europe.

36. What is the capital city of Hungary?
   A. Bratislava   B. Belgrade
   C. Budapest   D. Bucharest

37. What is Europe's largest economic land use?
   A. ranching and herding   B. commercial farming
   C. nomadic herding   D. subsistence farming

38. The Carpathian Mountains extend in a circular arc from Slovakia in the west to what other country in the southeast?
   A. Romania   B. Bulgaria
   C. Greece   D. Spain

39. Which of the following countries is experiencing a natural population decrease?
   A. Norway   B. Macedonia
   C. Romania   D. Denmark

40. Which country has the highest use of fossil fuels for electricity?
    A.   Poland   B.   Norway
    C.   France   D.   Austria

41. Which of the following Russian cities is on the boundary between the Volga Upland and the Oka-Don Plain?
    A.   Penza   B.   Ufa
    C.   St. Petersburg   D.   Voronezh

Atlas Questions -- The World -- Use the atlas to answer the following questions about the world

42. What nation is Sonsorol Island part of?
    A.   Vanuatu   B.   Nauru
    C.   Palau   D.   Federated States of Micronesia

43. What type of climate can you expect in the capital city of Nigeria?
    A.   savanna   B.   tropical rain forest
    C.   desert   D.   humid subtropical

44. Which Middle American country has the highest percentage of mango exportation?
    A.   Mexico   B.   Haiti
    C.   Costa Rico   D.   Cuba

45. What two provinces does Victoria Island lie in?
    A.   Nunavut and Manitoba   B.   Ontario and Manitoba
    C.   Quebec and New Brunswick   D.   Nunavut and Northwest Territories

46. How long is the third longest river in South America?
    A.   3915 miles   B.   2082 miles
    C.   3032 miles   D.   2040 miles

47. Which of the following is considered a West Slavic language?
    A.   Czech   B.   Bulgarian
    C.   Ukrainian   D.   Latvian

48. If it is 5pm on Tuesday in Recife, Brazil, what time and day is it in Helsinki, Finland?
    A.   9pm on Tuesday   B.   10pm on Tuesday
    C.   12 noon on Tuesday   D.   12 noon on Wednesday

49. Approximately how many doctors does Australia have?
    A.   7,000   B.   70,000
    C.   700,000   D.   7 million

50. Coats Land can be found on what continent?
    A.   South America   B.   Asia
    C.   Antarctica   D.   Europe

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Answer Key

Page number references in parentheses are found only in the **2018** or **2016** editions of the *Nystrom Desk Atlas*. **Scoring:** +5 for each correct answer; -2 for each incorrect answer. No points are deducted for skipped or unanswered items. Deduct 2 points for erasures/mark-outs not resulting in a correct answer.

1. **D** (93 / 97)

2. **C** (79 / 73)

3. **A** (86 / 80)

4. **B** (103 / 97)

5. **B** (90 / 84)

6. **C** (84 / 78)

7. **D** (85 / 79)

8. **A** (82 / 76)

9. **A** (81 / 75)

10. **B** (88 / 82)

11. **C**

12. **B**

13. **C**

14. **A**

15. **D**

16. **B**

17. **A**

18. **D**

19. **C**

20. **A**

21. **A**

22. **B**

23. **D**

24. **A**

25. **A**

26. **B**

27. **C**

28. **D**

29. **C**

30. **B**

31. **A**

32. **B**

33. **D**

34. **B**

35. **C**

36. **C** (159 / 147)

37. **B** (153 / 141)

38. **A** (150 / 138)

39. **C** (206 / 190)

40. **A** (154 / 142)

41. **A** (147,149 / 135,137)

42. **C** (188 / 172)

43. **A** (135,132 / 125,122)

44. **A** (111 / 105)

45. **D** (60 / 54)

46. **B** (cover)

47. **A** (47 / 43)

48. **B** (209 / 193)

49. **B** (39,205 / 35,189)

50. **C** (200 / 182)