Chemistry
3890

Readiness Assessment Test

Thank you for considering this course for your student. Here are some tips for success in the Readiness Assessment process.

- Please do not provide your student this assessment or its contents until you are ready for him or her to complete it in a single sitting with no books, notes, or outside help. It is intended to be a spot check of retained knowledge and skill.

- Make sure you have the latest version of this assessment. Ideally, please download it and have your student complete it within one week prior to enrollment.

- Completed Readiness Assessment materials for a course should be submitted immediately after you enroll in the course.

- **Readiness Assessment materials must be submitted by uploading from the Family Account in the Enrolled Courses view**. Readiness Assessment materials are not accepted through email.

- Visit Live Chat, or email TPS Support (support@pottersschool.org) for questions or assistance.

Part I: Academic Background (to be completed by the parent)

Age/Grade

1. How old will your student be as of **October 1st** of the academic enrollment year?

2. What grade will your student be in **at the start of this course**?

Related Coursework

1. Please provide the title of the most recently completed (or in-progress) course in the same subject area or related subject area that might help assess academic readiness for this course (Algebra 1 or higher course detail preferred if available):

    Course Name:

    a. What is the student's in-progress or final course grade (numeric grade if available)?

    b. What is the name of the course provider (e.g., online provider, taught at home, local college)?

    c. What is the name of the course curriculum (title and name of publisher of primary text if known)?

    d. Is the student on-track to complete the entire course/curriculum by the end of the current year (if in-progress)?

    e. How is the course evaluated? Is the work self-checked, parent-checked, or evaluated outside the home?

    f. What percentage (if any) of the student's grade is based on assessments that are completed without access to notes or outside resources and completed in a single sitting without the opportunity for rework to improve the grade?

Additional Background

1. Is your student's first language English or a different language? If different, what is his or her language background? (**Note:** Most TPS classes are designed for native English speakers, but we also provide support at several levels for students whose first language is not English.)

2. Is there additional information that might help us better know your student and understand his or her unique abilities and needs for the best course placement and academic outcome?

Part II: Readiness Test (to be completed by the student)

A calculator is permitted. No other outside resources may be used.

1. Which of the following measurements represents the largest value?
    A. 8.5×10^{-23} ml
    B. 3.6×10^{-8} ml
    C. 4.3×10^{-15} ml
    D. 2.9×10^{-7} ml

2. $(1.4 \times 10^{-8})(3.2 \times 10^{2})$
    A. 4.48×10^{-6}
    B. 4.48×10^{-4}
    C. 4.48×10^{-10}
    D. 4.48×10^{-16}

3. $(11.6 \times 10^{12})/(5.8 \times 10^{-6})$
    A. 6.728×10^{7}
    B. 6.728×10^{6}
    C. 2.0×10^{6}
    D. 2.0×10^{18}

4. $(2.78 \times 10^{-5}) + (6.51 \times 10^{-6})$
    A. 3.43×10^{-11}
    B. 9.29×10^{-5}
    C. 3.43×10^{-5}
    D. 9.29×10^{-6}

5. In Lily's chemistry class there are 25 girls and 10 boys. What is the simplest whole number ratio of girls to boys in this class?
   A. 25:10
   B. 2:5
   C. 5:7
   D. 5:2

6. The ratio of blue candies to brown candies is 5 to 8. If there are a total of 78 candies, how many of those candies are blue?
   A. 30
   B. 49
   C. 10
   D. 35

7. Solve for x: $\dfrac{3}{5} = \dfrac{x}{17}$
   A. 10.2
   B. 28.3
   C. 0.4
   D. 7.3

8. What is the simplified form of $3(2x + y)$?
   A. 5x + 3y
   B. 6xy
   C. 6x + 3y
   D. 6x + y

9. If $5t + s = 35$, what does t equal when s = 5?
   A. 8
   B. 6
   C. 12
   D. 35

10. What is $|-23.5| = ?$
   A. -23.5
   B. 23.5
   C. -24
   D. 24

11. $12m - (-4m) =$
   A. $3m$
   B. $8m$
   C. $12m$
   D. $16m$

12. Given that $PV = nRT$, solve for n.

    A. $n = \dfrac{PV}{RT}$

    B. $n = PV - RT$

    C. $n = \dfrac{RT}{PV}$

    D. $n = PV + RT$

13. If $r = d/t$, what formula can be used to find the value of t?

    A. t = r x d

    B. t = r/d

    C. t = d/r

    D. t = d – t

14. Given that 1 m = 100 cm, which of the following is true?

    A. 25 m = 0.025 cm

    B. 25 m = 2500 cm

    C. 25 m = 250 cm

    D. 25 m = 0.25 cm

15. 1 km = 1000 m; 1 hour = 60 minutes; 1 minute = 60 seconds
   Convert 12 km/hour to m/sec

    A. 43.2 m/sec

    B. 0.3 m/sec

    C. 3.3 m/sec

    D. 200 m/sec

16. The cost of mixed chocolates is $26.40 per kg. Sue buys 0.68 kg of chocolate. What is the total cost of her purchase?
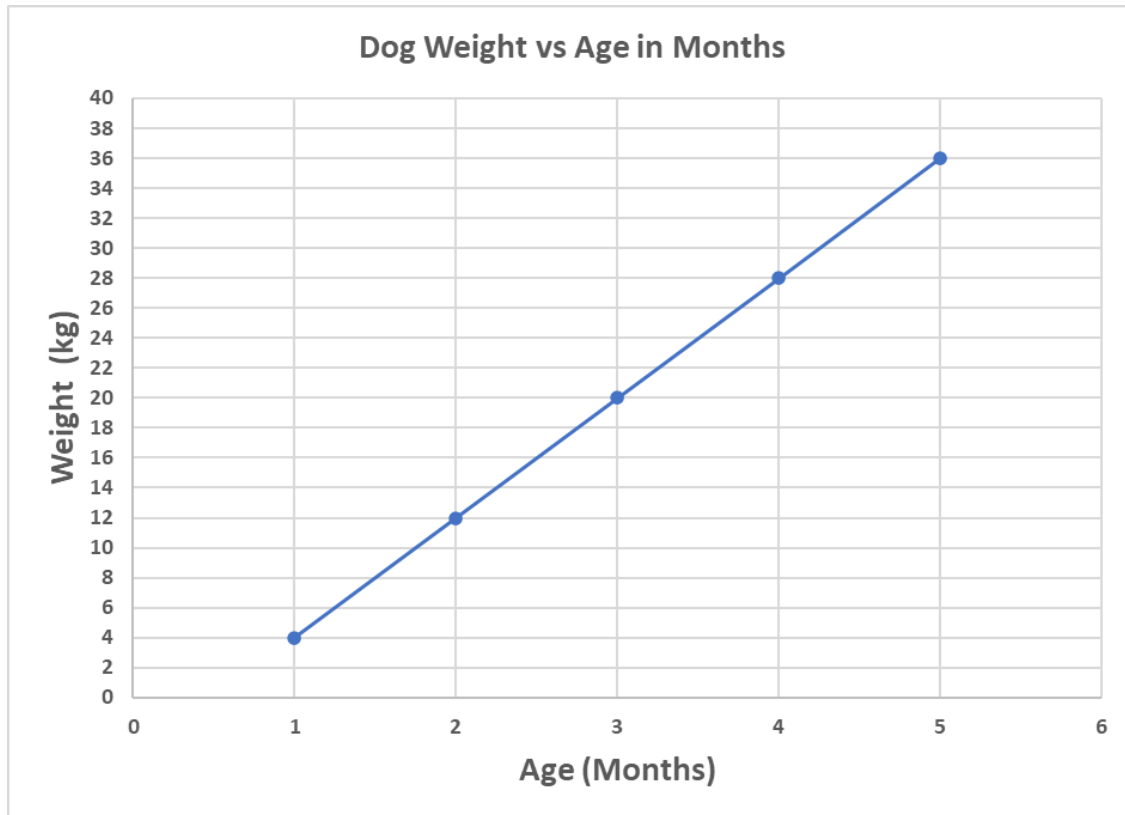
    A. $17.95

    B. $27.08

    C. $38.82

    D. $27.75

17. What is 75% of 200?

    A. 15,000

    B. 150

    C. 75

    D. 267

18. If a bag of snack mix contains 140 grams of pretzels, 196 grams of crispy cereal, and 112 grams of cheese crackers, what percentage of the snack mix is made up of cheese crackers?

    A. 25%

    B. 0.25%

    C. 40%

    D. 33.3%

Use the following graph to answer questions 19 – 20.

19. What is the independent variable (x axis variable)?

20. According to this graph, when a dog is 4 months old, what will be its weight?