The National
Parenting Center
Seal of Approval

Practice and Learn

数　学 下
Mathematics

美国小学生课堂练习册

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（美国家长协会认证印鉴）

编者按语

　　这套丛书是根据美国教师创新教材公司出版的《Practice and Learn》(学前班及1~6年级)选编的。原版书是经美国家长协会(The National Parenting Center)认证的现行课堂练习册。这套丛书全面反映了美国小学的现行教学内容和教学要求，同时也为我们展现了美国小学生生动活泼的学习场景。我们从中不仅可以了解美国小学生每天在学些什么么功课，做些什么样的作业，写些什么样的作文，开展些什么样的科技活动和文体活动，以及学生们应知应会的知识内容，而且还可以从中学习和掌握各科的英语专业术语，学会用地道的英语来表述所学过的知识，掌握日常生活、学习活动的英语表达方法。鉴于我国学生目前主要是靠课本学习英语，很少联系生活和学习实践，很少同其他学科相联系的现状，我们觉得，这套书的出版必将会开阔学生的眼界，丰富学生的学习内容，提高学生学英语的兴趣，促进学生英语水平的大幅度提高。

　　原版书是按年级分册的，不过各册也有所侧重，现改为按学科分册编排，主要是出于对两门主要学科，即语言(英语)和数学的考虑。就英语而言，它不是我们的母语，而是外语。我国的小学生在入学前一段不具备英语的语言背景，因此对应于各年级的原版书显得太深。故在选编时删去了一些难度较大和文化背景较深的部分。就数学而言，在四则运算方面大体与我们相同，将原书内容全部收入显得有些重复和多余，因此在选编时删去了大量的计算习题。除上述两点以外，本书原汁原味地收入了原版书的全部内容。

　　本书适用于我国的中小学生，尤其是双语学校的学生。对于初中生来说，虽然有些内容(特别是数学)显得浅一些，但可以充分利用本书来学习英语知识，丰富英语词汇，提高英语水平。特别是那些打算到英语国家上高中、上大学的学生，学习这套丛书能把国内的学习和国外的学习很好地衔接起来，提前了解和熟悉一下国外的学习生活，无疑是大有裨益的。

　　这种寓学习于娱乐中的模式正是我国教育体制中所欠缺的。我们的口号是："**英语是玩出来的，而不是学出来的。**"

　　美国教育大揭密——美国学生作业全真选编
　　英语就得天天练——与美国孩子同步学英语

CONTENTS
目 录

Estimating Decimals
小数的计算

Estimate the sum or difference using the adjusted front-end estimation. Then calculate the actual sum or difference.

1.   2.7   estimate   2.   4.75 estimate   3.   9.57 estimate
   + 6.93 _____   − 1.76 _____   + 0.44 _____

4.   0.58 estimate   5.   6.77 estimate   6.   15.3 estimate
   − 0.435 _____   + 2.8 _____   − 7.5 _____

7.   19.2 estimate   8.   4.2 estimate   9.   27.3 estimate
   + 36.5 _____   − 0.723 _____   − 22.9 _____

Estimate to compare the sum or difference. Use > for greater than and < for lesser than.

10. $16.3 + 2.33$ ⬭ 18   11. $26.75 - 12.09$ ⬭ 19

Tell whether the estimate is an overestimate (估计过高) **or underestimate** (估计不足).

12. $7.3 + 9.6 \approx 20$ 13. $10.7 + 9.9 \approx 30$

On Your Own!

14. Cindy needs to cut ribbon (丝带) for gift wrapping. She needs ribbons 2.6 meters, 1.5 meters, 0.75 meters, and 1.8 meters long. Her roll of ribbon has 5 meters. Will she have enough ribbon to wrap the gifts?

_____

_____

_____

_____

Adding and Subtracting Decimals
小数加减法

Place the decimal point in the sum.

1. $7.5 + 0.33 + 12.654 =$ _____

2. $6.053 + 2.271 + 12.6 =$_____

Find the sum.

3. $5.6 + 4.7 =$ _____

4. $22.75 + 16.1 =$ _____

5. $\$66.21 + \$6.93 =$ _____

6. $12.306 + 0.19 =$ _____

7.	3.82	8.	4.3	9.	0.1437	10.	6.7
	14.254		31.72		50.22		52.43
	+ 6.75		+ 5.246		+ 7.34		+ 1.625

11. $\$0.55 + \$37.81 + \$55.00 =$ _____

12. $60.1 + 352.33 + 5,075 + 0.88 =$ _____

Place the decimal point in the difference.

13. $6.75 - 3.25 =$ _____

14. $36.005 - 0.35 =$ _____

Find the difference.

15. $10.6 - 4.35 =$ _____

16. $245.8 - 83.19 =$ _____

17. $77.112 - 6.03 =$ _____

18. $8.045 - 3.72 =$ _____

19.	60.44	20.	5.6	21.	72.8	22.	67.03
	− 2.755		− 0.89		− 0.654		− 0.0058

23. $\$37.82 - \$8.46 =$ _____

24. $456.08 - 93.95 =$ _____

Problem Solving: Adding and Subtracting Decimals
解应用题：小数加减法

1. The monthly rainfall (降雨量) during the spring was 3.4 inches, 8.6 inches, and 10.2 inches over three months. What was the total rainfall?

_____

2. Sheila is redecorating (重新装修) the guest room. She needs 8.25 yards (码) for the curtains and 16.25 yards for the bedspread and to recover the chair. How many yards must be bought to assure Sheila that she will have enough material? (1码=0.9144米)

_____

3. The tennis (网球) player served (发球) the tennis ball at a top speed (最快速度) of 111.35 miles per hour. His opponent (对手) serves at a top speed of 106.85 miles per hour. What is the difference between the two speeds?

_____

4. Deacon and Gary had lunch together at a restaurant(饭馆). Deacon's entree(主菜) cost $13.75, while Gary's entree was $12.55. Both men had dessert (甜点) for $1.95 each. How much was the total bill?

_____

5. Mr. James has 3 deposits (存款) of $1,242.30, $653.21, and $125.89 to make in his checking account(支票账户). How much is his total deposit?

_____

6. Mr.Lee has a balance(余额) of $2,563.37 in his checking account. He needs to write two checks (支票): one for $833.25 and the other for $475.66. How much will be left in his checking account?

_____

7. Stacey scored (得分) a 5.75 in the technical merit (技术分) category in the ice skating championship (滑冰锦标赛). In the artistic interpretation (艺术表现) category, she scored a 5.9. Meredith outscored (超出) Stacey by 0.32. What was Meredith's overall score?

_____

8. When John went shopping, he bought sneakers (运动鞋) for $65.75, a pair of shorts (短裤) for $18.50, and a T-shirt for $12.95. How much money did he have left for lunch if he started out with (动身时带了) $100.00?

_____

9. Heather wants to buy a new video game (电子游戏)that costs $74.99. She only has $33.50. How much more does she need?

Multiplying Decimals
小数乘法

Place the decimal point in the product by estimating first.

1. $7.6 \times 8.3 =$ _____

2. $4.65 \times 6.8 =$ _____

3. $0.84 \times 5.3 =$ _____

4. $0.45 \times 0.93 =$ _____

Estimate the product. Then calculate the exact product.

5.
$$\begin{array}{r} 26.73 \\ \times\ \ 6.8 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 78 \\ \times\ \ 2.9 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 6.245 \\ \times\ \ 0.7 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 65.8 \\ \times\ \ 337 \\ \hline \end{array}$$

Calculate the product. Round money problems (钱数题) to the nearest cent (分).

9.
$$\begin{array}{r} 7.356 \\ \times\ \ 6.8 \\ \hline \end{array}$$

10.
$$\begin{array}{r} \$17.93 \\ \times\ \ 0.6 \\ \hline \end{array}$$

11.
$$\begin{array}{r} \$683.25 \\ \times\ \ 0.27 \\ \hline \end{array}$$

12.
$$\begin{array}{r} \$43.78 \\ \times\ \ 0.5 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 0.035 \\ \times\ \ 8 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 25.89 \\ \times\ \ 30.5 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 0.0057 \\ \times\ \ 778 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 7.206 \\ \times\ \ 18 \\ \hline \end{array}$$

17. $\$365.27 \times 2.8 =$ _____

18. $6{,}983 \times 6.217 =$ _____

19. $15.3 \times 1{,}000 =$ _____

20. $536 \times 100 =$ _____

21. $0.25 \times 10 =$ _____

22. $0.884 \times 100 =$ _____

23. $928.75 \times 10 =$ _____

24. $8.6 \times 1000 =$ _____

Estimation in Division
除法估算

Estimate to find the best quotient (最近似的商). Circle the answer.

1. 6)487   a. 60   b. 70   c. 80   d. 50

2. 5)14,482   a. 300   b. 30   c. 2,500   d. 3,000

3. 4,627 ÷ 23   a. 100   b. 2,000   c. 200   d. 3,000

4. 8)688   a. 100   b. 10   c. 80   d. 800

Write the best estimated quotient.

5. 7)65   6. 6)358   7. 5)3889

Divide to find the quotient.

8. 4)316   9. 6)2,586   10. 7)5,103

11. 9)73,463   12. 8)46,065   13. 3)14,053

14. 16,084 ÷ 4 =   15. 37,398 ÷ 7 =   16. 5)26,009

Division With Decimals
小数除法

Find the quotient.

1. $6.6 \div 3.3 =$ _____

2. $8.8 \div 11 =$ _____

3. $8.4 \div 2.1 =$ _____

4. $19.8 \div 9.9 =$ _____

5. $18.6 \div 6.2 =$ _____

6. $14.8 \div 3.7 =$ _____

7. $0.34\overline{)266.56}$

8. $0.134\overline{)3.39824}$

9. $6.5\overline{)300.3}$

10. $2.6\overline{)9.1}$

11. $0.035\overline{)2.5249}$

12. $0.12\overline{)2.832}$

13. $2.36\overline{)107.852}$

14. $0.57\overline{)0.3249}$

15. $27\overline{)0.96768}$

Divide. Then round the quotient to the place value shown.

16. $\$3.76 \div 5 =$ _____
               (cents)

17. $643.2 \div 2.8 =$ _____
              (hundredths)

18. $97 \div 13 =$ _____
              (tenths)

Division Practice
除法练习

Estimate the quotient.

1. $41 \overline{)248}$

2. $32 \overline{)155}$

3. $17 \overline{)3,605}$

_____   _____   _____

4. $15,689 \div 31 =$

5. $1,856 \div 29 =$

6. $57,352 \div 82 =$

_____   _____   _____

Divide to find the quotient.

7. $75 \overline{)66,389}$

8. $66 \overline{)135,472}$

9. $84 \overline{)589}$

10. $7 \overline{)8,400}$

11. $34 \overline{)5,900}$

12. $33 \overline{)2,860}$

13. $5 \overline{)18}$

14. $6 \overline{)25.62}$

15. $28 \overline{)165.088}$

16. $6.540 \div 30 =$

17. $15.15 \div 25 =$

18. $32.550 \div 70 =$

Factors
因 子

• *Factors* are numbers that can be equally divided with no remainder (余数).

• A *prime number* (质数) has itself and one as a factor.

• A *composite number* (合数) has more than two factors.

Example: Find (求) the factors of 15.
The factors of 15 are 1,3,5.
15 is a composite number because it has more than two factors.

```
    15                          15
   / \                         / \
  1×15        or              3×5
```

Directions: Factor (对……分解因子) each number and then identify it as being a prime or a composite number.

1. Factor 6

```
    / \        or        / \
  __×__                __×__
```

The factors of 6 are _____ .
6 is a (prime, composite) number.

2. Factor 8

```
    / \        or        / \
  __×__                __×__
```

The factors of 8 are _____ .
8 is a (prime, composite) number.

3. Factor 7

```
    / \
  __×__
```

The factors of 7 are _____ .
7 is a (prime, composite) number.

4. Factor 18

```
    / \        or        18                18
  __×__                 / \       or      / \
                      __×__             __×__
```
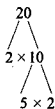
The factors of 18 are _____ .
18 is a (prime, composite) number.

Factors
因　子

Factors can be written in exponent form (指数形式).

Example: Find the factors of 20 and write them in exponent form.

```
      20
     /  \
  2 × 10
       /  \
     5 × 2
```

The factors of 20 are

$2 \times 2 \times 5 =$

$2^2 \times 5 =$

Directions: Find the factors of each number and then write the factors in exponent form.

1. 18_____   **4.** 24_____   **7.** 75_____

2. 16_____   **5.** 9 _____   **8.** 12_____

3. 20_____   **6.** 32_____   **9.** 36_____

The *greatest common factor* (GCF) (最大公因子) is the largest factor that a set of numbers has in common.

Example: Find the GCF of 6 and 12.
　　　　　　A. Find the factors of both numbers.
　　　　　　　　6 = 1, 2, 3
　　　　　　　　12 = 1, 2, 3, 4, 6
　　　　　　B. Find the common factors.
　　　　　　　　2 and 3 are factors of 6 and 12.
　　　　　　C. The GCF of 6 and 12 is 3 (excluding 6 itself).

Directions: Find the GCF for each set of numbers.

10. 4 _____   **11.** 10 _____

　　　12 _____   　　　30 _____

12. 20_____   **13.** 12 _____

　　　30 _____   　　　18 _____

14. 15_____   **15.** 18 _____

　　　50 _____   　　　20 _____

Fraction Quilts

分数花格被子

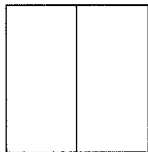Color to show the correct fraction.涂上颜色，求出正确的分数。
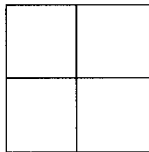
1.
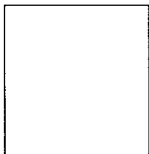
1 whole (整个)

2.
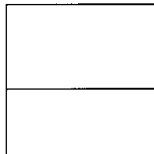
Color 2 halves (半个) = 1 whole

3.

_____ halves = 1 whole

4.
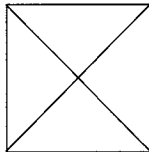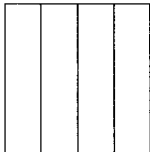
_____ fourths($^1/_4$) = $^1/_2$

_____ fourths = 1 whole

5.
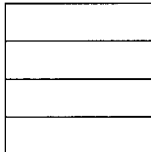
_____ fourths = $^1/_2$

_____ fourths = 1 whole

6.

_____ fourths = $^1/_2$

_____ fourths = 1 whole

7.

_____ fourths = $^1/_2$

_____ fourths = 1 whole

Parts of a Whole
整体的几部分

What part of each shape is shaded? Draw a line to the correct fractional part.
Hint: The top number of a fraction stands for the number parts that are colored.
The bottom number of a fraction stands for the total number of parts, colored
and not colored.

每个图的什么部分涂了阴影?画线连接到正确的分数部分。提示:分数的上面一个数
表示这个数量的部分涂了颜色。分数的下面一个数表示总的部分数量,包括涂色的
和没涂色的。

1.
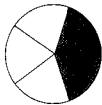
$\dfrac{1}{2}$

2.

$\dfrac{2}{5}$
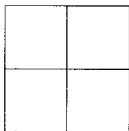
3.

$\dfrac{3}{5}$

4.

$\dfrac{2}{3}$

5.

$\dfrac{1}{3}$

6.

$\dfrac{1}{4}$

Coloring Fractions
给分数涂色

Color the part or parts of each shape or set of shapes to match the fractional number.
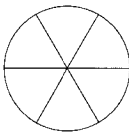给每个图形或每组图形的一部分或几部分上色，使其与分数值相匹配。

1.

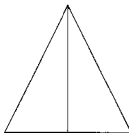$\dfrac{1}{4}$
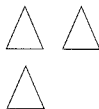
5.

$\dfrac{3}{4}$

2.

$\dfrac{3}{6}$

6.

$\dfrac{1}{6}$

3.

$\dfrac{1}{2}$

7.

$\dfrac{2}{3}$

4.

$\dfrac{2}{5}$

8.

$\dfrac{4}{5}$