

Objective: As your students read and learn about Alaska they will encounter a lot of large numbers. It's a great time for them to dig into place value and rounding with this math pack during center time.

Source: K5Learning


## Plaska BY The Nackground

This blog post offers some Alaska numbers you could share with students and incorporate into math activities if you have time.

It's no secret Alaska is a pretty impressive state - after all, it's the largest in our country with 586,412 square miles of land. That's more than twice the size of Texas! But sheer land mass isn't the only thing Alaska has going for it. Check out this roundup of amazing Alaska stats to keep in mind on your next trek north!

- Barrow, Alaska, the state's northernmost village, doesn't have a sunset for84 days in the summer. If you're up above the Arctic Circle around the summer solstice, you might actually find yourself wearing sunglasses in the middle of the night.
- Seventeen of the 20 tallest mountains in the United States are in Alaska. Denali, the highest peak in North America, towers at 20,320 feet.
- Alaska has more miles of coastline than any other state in the U.S. At6,640 miles, Alaska's coastline is twice the length of the entire Lower 48. (In case you're wondering, that's the term Alaskans use when referring to the rest of the country.)
- Most of us can't see it from our house, but Alaska's nearest point to Russia is only about 55 miles away.
- Alaska has more than 3,000 rivers and 3 million lakes. And no, they definitely don't all have names.
- Got glaciers? It's estimated that there are more than 100,000 glaciers in Alaska and they cover about 5 percent of the state. Most of these don't have names either. In fact, there are only 616 officially named glaciers here.
- Like open spaces? At approximately one person per square mile, Alaska has the lowest population density in the country. (Warning: you will not automatically receive your own square mile of land upon moving here.)
- We're used to that shake, rattle and roll! Alaska has about 24,000earthquakes each year, making it the most seismically active state in the U.S. Thankfully only a fraction of these are even noticeable to us on the earth's surface.
- With all that daylight, you bet we've got some serious crops to show for it. Alaska's record-holding cabbage weighed in at 138.3 pounds in 2012.
- Admiralty Island in Southeast Alaska has the highest concentration of brown bears in the world. The island covers more than one million acres or 1,664 square miles and is host to more than 1,500 brown bears.
- Anchorage's Lake Hood is the world's busiest seaplane base and might see 800 takeoffs and landings by seaplanes on a high-traffic summer day.
- The lowest recorded temperature in Alaska was -80 degrees Fahrenheit. This frigid record was set at Prospect Creek Camp in 1971.
- Alaska was purchased by the United States from Russia in 1867 for $\$ 7.2$ million. It was dirt cheap, at only 2 cents per acre.

Do these numbers blow your mind? We'll give you a break for now. But just remember Alaska is big, wild and beautiful and we've got the stats to back it up!

Build a 4-digit number from the parts
Grade 4 Place Value Worksheet
Example: $1,836=1,000+800+30+6$

Write the 4-digit numbers
1.
_ $1,000+800+90+3$
2. $7,000+700+40+7$
4. $5,000+200+40+2$
6. $\quad 3,000+800+40+1$
_ $2,000+200+40+2$
7. $8,000+100+30+8$
8. $4,000+600+70+2$
10. $6,000+100+40$
12.
_ $9,000+900+80+5$
13.
_1,000 + 800 + $90+2$
14.
_ $4,000+400+70+4$
15. $6,000+900+10+4$
17. $2,000+900+20+1$
16.

18. $\qquad$

## Build a 4-digit number from the parts

Grade 4 Place Value Worksheet
Example: $1,836=1,000+800+30+6$

Write the 4-digit numbers

1. $1,8931,000+800+90+3$
2. $\underline{1,817} 1,000+800+10+7$
3. $2,2422,000+200+40+2$
4. $8,1388,000+100+30+8$
5. $8,2958,000+200+90+5$
6. $\underline{5,050} 5,000+50$
7. $1,8921,000+800+90+2$
8. $6,9146,000+900+10+4$
9. $2,9212,000+900+20+1$
10. $7,7477,000+700+40+7$
11. $5,2425,000+200+40+2$
12. $\underline{3,841} 3,000+800+40+1$
13. $4,6724,000+600+70+2$
14. $6,140 \quad 6,000+100+40$
15. $9,9859,000+900+80+5$
16. $4,4744,000+400+70+4$
17. $8,5418,000+500+40+1$
18. $7,6827,000+600+80+2$

## Build a 5-digit number from the parts

## Grade 4 Place Value Worksheet

Example: $\quad 71,836=70,000+1,000+800+30+6$

Write the 5-digit numbers

1. $\qquad$

$$
40,000+2,000+400+60+8
$$

2. 

$$
70,000+5,000+200+30+5
$$

3. $\qquad$ $40,000+5,000+500+80$
4. 

90,000 +1,000+400+60+3
5. $\qquad$ $10,000+2,000+800+30+7$
6.

$$
10,000+8,000+400+10+4
$$

7. $\qquad$

$$
10,000+9,000+400+40+3
$$

8. 


9. $\qquad$ $20,000+2,000+400+20+3$
10. $\qquad$ $40,000+5,000+300+30+9$

## Build a 5-digit number from the parts

Grade 4 Place Value Worksheet
Example: $\quad 71,836=70,000+1,000+800+30+6$

Write the 5-digit numbers

1. $\underline{42,468} 40,000+2,000+400+60+8$
2. $75,23570,000+5,000+200+30+5$
3. $45,580 ~ 40,000+5,000+500+80$
4. $91,46390,000+1,000+400+60+3$
5. $12,83710,000+2,000+800+30+7$
6. $18,41410,000+8,000+400+10+4$
7. $19,44310,000+9,000+400+40+3$
8. $73,97170,000+3,000+900+70+1$
9. $22,42320,000+2,000+400+20+3$
10. $45,33940,000+5,000+300+30+9$

## Build a 6-digit number from the parts

## Grade 4 Place Value Worksheet

Example: $\quad 471,836=400,000+70,000+1,000+800+30+6$

Write the 6-digit numbers
1.

2.
[ $500,000+70,000+8,000+200+70+2$
3.

$$
700,000+10,000+8,000+600+70+7
$$

4. $\qquad$ $900,000+50,000+3,000+500+30+4$
5. 


6. $\square$
7. $\qquad$ $200,000+50,000+4,000+300+40+7$
8. $\qquad$ $900,000+70,000+5,000+3$
9. $\qquad$ $900,000+70,000+900+30+4$
10.


## Build a 6-digit number from the parts

Grade 4 Place Value Worksheet
Example: $\quad 471,836=400,000+70,000+1,000+800+30+6$

Write the 6-digit numbers

1. $\underline{346,700} 300,000+40,000+6,000+700$
2. $578,272500,000+70,000+8,000+200+70+2$
3. $718,677700,000+10,000+8,000+600+70+7$
4. $953,534900,000+50,000+3,000+500+30+4$
5. 224,172 200,000 + 20,000 + 4,000 + $100+70+2$
6. $\underline{125,693} 100,000+20,000+5,000+600+90+3$
7. $254,347200,000+50,000+4,000+300+40+7$
8. $\underline{975,003} 900,000+70,000+5,000+3$
9. $\underline{970,934} 900,000+70,000+900+30+4$
10. $537,912500,000+30,000+7,000+900+10+2$

Find the missing place value from a 4-digit number
Grade 4 Place Value Worksheet
Find the missing numbers:

1) $1+4,000+900+\ldots=4,911$
2) $0+50+$ $\qquad$ $+4=1,054$
3) $400+60+$ $\qquad$ $+4=1,464$
4) $1+60+400+$ $\qquad$ $=6,461$
5) $2+100+$ $\qquad$ $+80=2,182$
6) $6+800+$ $\qquad$ $+20=8,826$
7) $\qquad$ $+700+1,000+40=1,742$
8) $3,000+$ $\qquad$ $+80+3=3,683$
9) $5+70+900+\ldots=1,975$
10) $8,000+400+$ $\qquad$ $+6=8,466$
11) 
12) $5+10+200+\ldots=5,215$
13) $60+$ $\qquad$ $+400+8,000=8,460$
14) $8+$ $\qquad$ $+7,000+10=7,318$
15) $3+900+$ $\qquad$ $+60=9,963$
16) $\qquad$ $+90+1,000+8=1,098$

## Answers

1) 10
2) 1,000
3) 1,000
4) 6,000
5) 2,000
6) 8,000
7) 2
8) 600
9) 1,000
10) 60
11) 0
12) 5,000
${ }^{10)} 0$
13) 300
14) 9,000
${ }^{16)} 0$

Find the missing place value from a 5-digit number
Grade 4 Place Value Worksheet
Find the missing numbers:

$$
\begin{aligned}
& \text { 1) } 100+70+\ldots+6,000+1=16,171 \\
& +80+50,000+2,000+1=52,581 \\
& \text { 3) } 500+40+40,000+8,000+ \\
& =48,547 \\
& \text { 4) } 5,000+\ldots+20+7+50,000=55,127 \\
& \text { 5) } 20,000+900+70+8,000+ \\
& =28,972 \\
& \text { 6) } 4+700+ \\
& +0+20,000=25,704 \\
& \text { 7) } 400+ \\
& +4+5,000+80=95,484 \\
& \text { 8) } 500+10+30,000+9,000+ \\
& =39,510 \\
& \text { 9) } 2,000+ \\
& +90+8+20,000=22,898 \\
& \text { 10) } 400+ \\
& +8+1,000+90=81,498 \\
& \text { 11) } \\
& +30,000+700+7,000+2=37,792 \\
& \text { 12) } 6+900+ \\
& +20+10,000=19,926
\end{aligned}
$$

Answers

1) 10,000
2) 500
3) 7
4) 100
5) 2
6) 5,000
7) 90,000
8) 0
9) 800
${ }^{10)}$ 80,000
10) 90
${ }^{12)} 9,000$

Find the missing place value from a 6-digit number
Grade 4 Place Value Worksheet
Find the missing numbers:

1) $60,000+900,000+$ $\qquad$ $+1,000+4+30=961,134$
2) $0+40+200+4,000+$ $\qquad$ $+200,000=204,240$
3) $7+60+500+9,000+10,000+$ $\qquad$ = 319,567
4) $1+200+4,000+\ldots+20+900,000=954,221$
5) $300,000+70,000+800+2,000+$ $\qquad$ $+7=372,857$
6) $600,000+70,000+$ $\qquad$ $+5,000+70+5=675,775$
7) $5+$ $\qquad$ $+5,000+10,000+50+500,000=515,155$
8) $20,000+100,000+$ $\qquad$ $+1,000+9+80=121,789$
9) $0+$ $\qquad$ $+500+0+0+60=700,560$
10) $3+200+0+90+$ $\qquad$ $+400,000=460,293$
11) $1+600+3,000+20,000+50+$ $\qquad$ = 523,651

Answers

1) 100
2) 0
3) 300,000
4) 50,000
5) 50
6) 700
7) 100
8) 700
9) 700,000
10) 60,000
11) 500,000
(K5

## Round numbers $0-1,000$ to the nearest 10

Grade 4 Rounding Worksheet
Example: 329 rounded to the nearest 10 is 330

Round to the nearest ten.

1. $8 \underline{0} 4=$ $\qquad$
2. $643=$ $\qquad$ 3. $1 \underline{7} 1=$ $\qquad$
3. $7 \underline{3} 5=$
$\qquad$ 6. $1 \underline{8} 1=$ $\qquad$
4. $245=$ $\qquad$ 9. $6 \underline{8} 4=$ $\qquad$
5. $149=$ $\qquad$ 12. $4 \underline{8} 1=$ $\qquad$
6. $2 \underline{9} 8=$ $\qquad$ 15. $856=$ $\qquad$
7. $246=$ $\qquad$
8. $550=$ $\qquad$ 18. $893=$ $\qquad$
9. $1 \underline{0} 9=$ $\qquad$ 21. $9 \underline{3} 6=$ $\qquad$
10. $1 \underline{0} 1=$ $\qquad$
(K5

## Round numbers $0-1,000$ to the nearest 10

Grade 4 Rounding Worksheet
Example: 329 rounded to the nearest 10 is 330

Round to the nearest ten.

$$
\text { 1. } 8 \underline{0} 4=800
$$

2. $643=640$
3. $1 \underline{7} 1=170$
4. $7 \underline{3} 5=740$
5. $1 \underline{8} 1=180$
6. $7 \underline{4} 7=\underline{750}$
7. $2 \underline{4} 5=250$
8. $6 \underline{8} 4=680$
9. $4 \underline{15}=\underline{420}$
10. $149=150$
11. $4 \underline{8} 1=\underline{480}$
12. $246=\underline{250}$
13. $2 \underline{9} 8=300$
14. $856=860$
15. $4 \underline{9} 7=500$
16. $5 \underline{5} 0=550$
17. $8 \underline{9} 3=890$
18. $1 \underline{101}=\underline{100}$
19. $1 \underline{0} 9=110$
20. $936=940$

## Round numbers 0-10,000 to the nearest 100

Grade 4 Rounding Worksheet
Example: 4,689 rounded to the nearest 100 is 4,700

Round to the nearest hundred.

1. $9, \underline{8} 20=$ $\qquad$
2. $5,470=$ $\qquad$ 3. $6,233=$ $\qquad$
3. $4, \underline{8} 81=$ $\qquad$ 6. $3, \underline{0} 27=$ $\qquad$
4. $4, \underline{7} 10=$ $\qquad$ 9. $2, \underline{8} 89=$ $\qquad$
5. $5,872=$ $\qquad$ 12. $1,749=$ $\qquad$
6. $9,837=$ $\qquad$ 14. $7, \underline{9} 32=$ $\qquad$ 15. $6,125=$ $\qquad$
7. $8,684=$ $\qquad$ 18. $8, \underline{0} 97=$ $\qquad$
8. $1,083=$ $\qquad$ 20. $8,328=$ $\qquad$ 21. $1,853=$ $\qquad$
(K5

## Round numbers 0-10,000 to the nearest 100

Grade 4 Rounding Worksheet
Example: 4,689 rounded to the nearest 100 is 4,700

Round to the nearest hundred.

1. $9, \underline{820}=9,800$
2. $5, \underline{470}=5,500$
3. $6, \underline{2} 33=6,200$
4. $2, \underline{9} 30=\underline{2,900}$
5. $4, \underline{8} 81=4,900$
6. $3, \underline{0} 27=3,000$
7. $\underline{5} 45=500$
8. $4, \underline{710}=\underline{4,700}$
9. $2, \underline{8} 89=\underline{2,900}$
10. $195=200$
11. $5, \underline{8} 72=5,900$
12. $1,749=1,700$
13. $9, \underline{8} 37=\underline{9,800}$
14. $7, \underline{9} 32=7,900$
15. $6, \underline{1} 25=6,100$
16. $8, \underline{713}=8,700$
17. $8, \underline{6} 84=8,700$
18. $8, \underline{0} 97=8,100$
19. $1, \underline{0} 83=\underline{1,100}$
20. $8, \underline{3} 28=8,300$
21. $1,853=1,900$

## Round numbers 0-10,000 to the nearest 1,000

Grade 4 Rounding Worksheet
Example: 4,689 rounded to the nearest 1,000 is 5,000

Round to the nearest thousand.

1. $1,539=$ $\qquad$
2. $8,764=$ $\qquad$ 3. $3,695=$ $\qquad$
3. $3,599=$ $\qquad$ 6. $209=$ $\qquad$
4. $5,912=$ $\qquad$ 9. $1,908=$ $\qquad$
5. $\underline{5}, 388=$ $\qquad$ 11. $160=$ $\qquad$ 12. $1,329=$ $\qquad$
6. $\underline{6}, 273=$ $\qquad$
7. $2,046=$ $\qquad$ 15. $4,218=$ $\qquad$
8. $\underline{9}, 186=$ $\qquad$
9. $7,284=$ $\qquad$ 18. $1,658=$ $\qquad$
10. $9,129=$ $\qquad$ 20. $4,137=$ $\qquad$ 21. $\underline{6}, 086=$ $\qquad$

Round numbers 0-10,000 to the nearest 1,000
Grade 4 Rounding Worksheet
Example: 4,689 rounded to the nearest 1,000 is 5,000

Round to the nearest thousand.

1. $1,539=\underline{2,000}$
2. $\underline{8}, 764=\underline{9,000}$
3. $\underline{3}, 695=4,000$
4. $\underline{8}, 220=\underline{8,000}$
5. $\underline{3}, 599=4,000$
6. $209=0$
7. $\underline{3}, 941=\underline{4,000}$
8. $\underline{5}, 912=6,000$
9. $1,908=\underline{2,000}$
10. $\underline{5}, 388=5,000$
11. $160=0$
12. $1,329=1,000$
13. $\underline{6}, 273=\underline{6,000}$
14. $2,046=2,000$
15. $4,218=\underline{4,000}$
16. $\underline{9}, 186=9,000$
17. $\underline{7}, 284=7,000$
18. $1,658=\underline{2,000}$
19. $\underline{9}, 129=\underline{9,000}$
20. $4,137=\underline{4,000}$
21. $\underline{6}, 086=\underline{6,000}$

## Round numbers under 1 million to the nearest 10,000

## Grade 4 Rounding Worksheet

Example: 4,689 rounded to the nearest 1,000 is 5,000

Round to the nearest ten thousand.

1. $87,211=$ $\qquad$
2. $710,565=$ $\qquad$ 3. $5 \underline{8} 0,169=$ $\qquad$
3. $4 \underline{2} 2,798=$ $\qquad$
4. $2 \underline{8} 8,335=$ $\qquad$
5. $9 \underline{0} 8,579=$ $\qquad$
6. $931,268=$ $\qquad$
7. $4 \underline{9} 2,621=$ $\qquad$
8. $627,154=$ $\qquad$
9. $2 \underline{7} 4,768=$ $\qquad$ 11. $2 \underline{2} 9,295=$ $\qquad$ 12. $7 \underline{6} 8,194=$ $\qquad$
10. $6 \underline{0} 5,176=$ $\qquad$ 14. $541,473=$ $\qquad$ 15. $4 \underline{3} 1,586=$ $\qquad$
11. $2 \underline{8} 5,896=$ $\qquad$ 17. $2 \underline{7} 5,370=$ $\qquad$ 18. $5 \underline{8} 2,072=$ $\qquad$
12. $914,574=$ $\qquad$ 20. $820,384=$ $\qquad$ 21. $15,850=$ $\qquad$

## Round numbers under 1 million to the nearest 10,000

Grade 4 Rounding Worksheet
Example: 4,689 rounded to the nearest 1,000 is 5,000

Round to the nearest ten thousand.

1. $\underline{87,211=\underline{90,000}}$ 2. $7 \underline{10,565}=\underline{710,000} 3.5 \underline{80,169}=\underline{580,000}$
2. $4 \underline{222,798}=\underline{420,000} 5.2 \underline{8} 8,335=\underline{290,000}$
3. $9 \underline{0} 8,579=\underline{910,000}$
4. $9 \underline{331,268}=\underline{930,000}$
5. $4 \underline{9} 2,621=\underline{490,000}$
6. $6 \underline{27,154}=\underline{630,000}$
7. $2 \underline{7} 4,768=\underline{270,000} 11.2 \underline{2} 9,295=\underline{230,000} 12 \cdot 7 \underline{68}, 194=\underline{770,000}$
8. $\mathbf{6} \underline{\mathbf{0}}, \mathbf{1 7 6}=\underline{610,000} 14.5 \underline{41}, 473=\underline{540,000} 15.4 \underline{3} 1,586=\underline{430,000}$
9. $2 \underline{8} 5,896=\underline{290,000} 17.2 \underline{7}, 370=\underline{280,000} 18 \cdot 5 \underline{8} 2,072=\underline{580,000}$
10. $914,574=\underline{910,000} 20.8 \underline{20,384}=\underline{820,000} 21 \cdot \underline{15,850}=\underline{20,000}$

## Mixed rounding: round numbers to the underlined digit

## Grade 4 Rounding Worksheet

Example: 4,689 rounded to the nearest 1,000 is 5,000

Round to the accuracy of the underlined digit.

1. $5 \underline{6}, 914=$ $\qquad$ 2. $77,453=$ $\qquad$ 3. $63,678=$ $\qquad$
2. $1 \underline{9}, 113=$ $\qquad$
3. $1 \underline{5}, 003=$ $\qquad$
4. $33,5 \underline{7} 5=$ $\qquad$
5. $33,446=$ $\qquad$
6. $84,822=$ $\qquad$
7. $95,150=$ $\qquad$
8. $49,3 \underline{32}=$ $\qquad$
9. $3,655=$ $\qquad$ 12. $97,7 \underline{2} 2=$ $\qquad$
10. $59,899=$ $\qquad$
11. $32,420=$ $\qquad$
12. $20,1 \underline{1} 1=$ $\qquad$
13. $21,391=$ $\qquad$ 17. $75,705=$ $\qquad$ 18. $57, \underline{3} 11=$ $\qquad$
14. $6 \underline{7}, 195=$
15. $77,303=$ $\qquad$ 21. $90,205=$ $\qquad$

Mixed rounding: round numbers to the underlined digit

## Grade 4 Rounding Worksheet

Example: 4,689 rounded to the nearest 1,000 is 5,000

Round to the accuracy of the underlined digit.

1. $5 \underline{6}, 914=\underline{57,000}$
2. $77, \underline{453}=\underline{77,500}$
3. $6 \underline{3}, 678=\underline{64,000}$
4. $1 \underline{9}, 113=\underline{19,000}$
5. $1 \underline{5}, 003=\underline{15,000}$
6. $33,5 \underline{7} 5=33,580$
7. $33,446=\underline{33,400}$
8. $84,822=\underline{85,000}$
9. $95, \underline{1} 50=\underline{95,200}$
10. $49,3 \underline{322}=\underline{49,330}$ 11. $\underline{3}, 655=\underline{4,000}$
11. $97,7 \underline{2} 2=\underline{97,720}$
12. $59,8 \underline{9} 9=\underline{59,900}$ 14. $32,420=\underline{32,000}$ 15. $20,1 \underline{5} 1=\underline{20,150}$
13. $2 \underline{1}, 391=\underline{21,000}$ 17. $7 \underline{5}, 705=\underline{76,000}$ 18. $57, \underline{3} 11=57,300$
14. $6 \underline{7}, 195=\underline{67,000} \quad$ 20. $77, \underline{303}=\underline{77,300}$
15. $9 \underline{0}, 205=\underline{90,000}$

## Estimating and rounding

## Grade 4 Word Problems Worksheet

Use estimation and rounding to choose the appropriate answer for each problem.

1. There are about 310 passengers in each car of the city train. As there are 8 cars for each train, there are about $\qquad$ passengers on each train.
a. 240
b. 2,400
c. 2,004
2. The first bus had 96 passengers and the second bus had 107 passengers. There are about $\qquad$ passengers into total.
a. 100
b. $\quad 150$
c. 200
3. In the morning, there are about 452 planes taking off from the airport and 127 of the planes are delayed for more than 15 minutes. About $\qquad$ planes take off within 15 minutes of the scheduled time.
a. 450
b. 130
c. 330

4. The distance between two bus terminals is 390 km . It takes the bus 4 hours to go from one terminal to another. The speed of the bus is about $\qquad$ km per hour.
a. 100
b. 10
C. 386
5. In a city, there are 45,960 electric cars and 96,113 gas cars. There are about $\qquad$ more gas cars than electric cars.
a. 5,000
b. 50,000
C. 5,100
6. A pilot flies 5 trips totalling 7,531 miles in a day. Each trip is about $\qquad$ miles.
a. 1,500
b. 2,500
C. 150

## Answers

1. b. $2,400(300 \times 8=2,400)$
2. c. $200(100+100=200)$
3. c. $330(450-120=330)$
4. a. $100(400 \div 4=100)$
5. b. $50,000(96,000-46,000=50,000)$
6. a. $1,500(7,500 \div 5=1,500)$
