Student Activity Book

Using Base-Ten Pieces

Questions 1–10 (SAB pp. 121–124)

An example of base-ten shorthand and a completed Base-Ten Recording Sheet are given in Question 1.

I. 539



- **2.** 234
- **3.** 5183
- **4.** 1245
- **5.** 773
- **6.** 282
- **7.** 1832



Student Activity Book - Page 121





Student Activity Book - Page 123



Student Activity Book

- **8.** 1386
- **9.** 745
- **IO.** 783

Using Mental Math Strategies

Questions 11-16 (SG pp. 125-128)

- **11.** 400; Possible explanation: 300 + 50 + 40 =390 and 8 + 2 = 10. So 352 + 48 = 400.
- **12.** 859; Possible explanation: 900 50 is 850. So, 907 - 50 = 857, I took off 2 too many so I add them back in to get 859.907 - 48 = 859.

Workshop: Addition and Subtraction

- **I3. A.** 430
 - **B.** 429
 - **C.** 254
 - **D.** 5700



Name	Date	Name .		Date
Using Mental Math	Strategies	*13.	Mrs. Dewey challenged the class to use solve each of the problems below. Grac recorded their mental math strategies	e a mental math s ce and her classn
✓ Self-Check: Quest	ions 11-12		each one using a similar strategy. Expla partner.	in your thinking t
11. Use a mental math str Make some notes belo	ategy to solve 352 + 48. Explain your strategy.		541 + 199 =	A. 232 + 198
		4	Put it with the 199 right away. Now the problem is 540 + 200, which is easy, 740"	
		2	52 - 125 =	B. 504 - 75
		"I	thought about money."	
34			250 - 125 = 125 and 125 + 2 = 127	ļ
12. Use a mental math str	ategy to solve 907 – 48. Explain your strategy.		302 - 78 =	C. 352 - 98
Make some notes belo	w.	1	number line and counted up. My hops were 2, 10, 10, 100, 100, 2. That is 224."	
2			+2 +10 +10 +100 +2 78 80 90 100 200 300 302	
et Publishing Compa		20 " 4 3	020 + 1260 = separated out the thousands. added 2000 + 1000. That is 000. Then, 20 + 260 = 280,	D. 3150 + 25
ndail Hu	Vorking On It! Getting It! Got It!	90 31	to my answer is $3000 + 280 = \frac{1000 + 260}{1000 + 260}$	2
Can I Do This?	I could use some extra help.		3000 + 280	
8 Use mental math strategies to add or subtract.	★ Q# 13-15, 16E-G • Q# 14-16 ■ Q# 15-16			
Workshon: Addition and Subtraction	SAB, Grade 4, Unit 4, Lesson 7, 125	126 sa	R . Grade A . Unit A . Lesson 7	Workshon: Addition

Student Activity Book - Page 125

Student Activity Book - Page 126



Sph

- **14.** 225; Possible explanation: I counted back 302 2 is $300.\ 300 75 = 225.$
- **15.** 3200: Possible explanation: I took 4 from 1144, added it to 2056, and re-wrote the problem as $2060 + 1140.\ 60 + 40 = 100.\ So,\ 100 + 100 + 2000 + 1000 = 3200.$

I6. A. 600	B. 106
C. 338	D. 728
E. 1044	F. 502

G. Answer will vary.

Using Paper and Pencil

Questions 17-25 (SAB pp. 129-131)

17. 85; Possible strategies:

$$48 = 40 + 8 \qquad |||| = 30 + 7 \\ \hline 70 + 16 = 86 \qquad |||| = 86$$

18. 69, Examples of possible strategies are given in Question 17.

Name	Date
★●14.	Use a mental math strategy to solve 302 - 77. Explain your strateg to your partner. Make some notes to record your partner's strategy below. Include your partner's name.
	<u>S</u>
~	
★●■ 15	5.Use a mental math strategy to solve 2056 + 1144. Explain your strategy to your partner. Make some notes to record your partner's strategy below. Include your partner's name.
	\cap
Ĺ	<u>S</u>
2	<u>S</u>
Ĺ	<u>S</u>

Student Activity Book - Page 127



Student Activity Book - Page 128

Student Activity Book - Page 129







- **20.** 122
- **21.** 58
- **22.** 117
- **23.** 4433
- **24.** 1169
- **25.** 1619

Choosing a Strategy

Questions 26-35 (SAB pp. 132-134)

- **26.** Between 450 and 480 box tops after 3 weeks. Possible explanation: 150 + 150 + 150 = 450and 160 + 160 + 160 = 450 + 30 = 480.
- **27.** The two classes collected 799 box tops. Possible explanation: I used the compact method to add 391 + 408.
- **28.** 135; Possible strategy:

$$284 = 200 + 80 + 4 = 200 + 70 + 14$$
$$-\underline{149} = 100 + 40 + 9 = \underline{100 + 40 + 9}$$
$$\underline{100 + 30 + 5} = 135$$

Problem	One Strategy	Another Strategy	choosing a Sti	ategy		
★●■ 22. 286 - 169			√ Self-Check: C	uestions 26-28	5	
			Solve each of the fol Choose from mental estimation strategie your thinking.	llowing problems u I math strategies, p s. Show your writte	using an approp paper-and-penc en work. Be pre	riate strategy. il strategies, and pared to explain
			26. Room 204 colle how many will t	ected between 150 a hey collect in 3 wee	and 160 box tops ks?	each week. About
● ■ 23. 1158 + 3275						
			27. Mrs. Dewey's cl collected 408 b	lass collected 391 b ox tops. How many	oox tops and Mr. did they collect	Bookler's class altogether?
● ■ 24. 2318 – 1149			28. Mr. Trimmer's cl collected 149 th the last two we	lass collected 284 b he first week. How n eks?	oox tops during 3 nany box tops w	weeks. The class ere collected during
				Working On It!	Getting It!	Got It!
■ 25. 4216 2597			Can I Do This?	I could use some extra help.	I just need some more practice.	I'm ready for a challenge.
			Choose an appropriat addition or subtraction strategy.	e * Q# 29–30, 33–35	• Q# 30–35	■ Q# 31–35

Student Activity Book - Page 131

Student Activity Book - Page 132

- **29. A.** 584; mental math; 794 - 200 is 594 - 10 is 584.
 - **B.** 4131; mental math; 3126 + 1000 = 4126; 4126 + 5 = 4131.
 - C. 1117; paper-and-pencil
 - **D.** 132; paper-and-pencil
- **30.** Responses will vary.
- **31.** 3280 tickets; paper-and-pencil strategy.
- **32.** \$6617; mental math strategy: 7022 - 400 is 6622; 6622 - 5 = 6617.
- **33.** Between 750 and 1200 tickets per day. Estimate. 250 + 250 + 250 = 750 and 400 + 400 + 400 = 1200.
- **34.** 3262 tickets, paper-and-pencil strategy.
- **35.** Responses will vary.

sense for you chos mental m	each of e. Show ath strat	the follo your wri egy.	wing problems. Check the strategy type tten work. Be prepared to share your	
Problem	Mental Math	Paper- and- Pencil	Describe your mental math or your paper-and-pencil strategy	
125 + 177	✓		302. I thought about money. 125 + 175 = 300 plus 2 more equals 302.	
283 + 645		~	283 = 200 + 80 + 3 + <u>645 = 600 + 40 + 5</u> 800 + 120 + 8 = 800 + 128 = 92	
A. 794 – 210				
B. 1005 + 3126				
C. 633 + 484				
D. 401 – 269				
•30. Choose a	a problen	n from al	bove and explain how you can solve it	

Student Activity Book - Page 133

Solve e Choose estimat your th	ach of the following problems using an appropriate strategy. from mental math strategies, paper-and-pencil strategies, and ion strategies. Show your written work. Be prepared to explain nking.	
●∎31.	The Student Council was raising money for a school project by selling raffle tickets. They sold 1267 tickets the first week and 2013 tickets the second week. How many tickets have they sold?	
●∎32.	The council collected \$7022 from raffle tickets but had to spend \$405 for prizes. How much money does the student council have left?	
*● ∎33	The Student Council sells between 250 and 400 tickets each day. About how many tickets will they sell in 3 days?	@lmvofdeq
*●∎34	. The students sold 2413 tickets the third week and 849 tickets the fourth week. How many tickets were sold during these two weeks?	⊡Bbka∿ii⊞rkq12∦r_ifpefk
*●∎35	Choose a problem in Questions 31–34 that you can solve using mental math. Explain your strategy.	d 🕮 ljm^kv

Student Activity Book - Page 134