Making 1 (1.00), 10, 100, 1,000 and 10,000 Resource Packet

Resource Prepared for use with Video On "Counting UP **1** to 'Make 10"

by Blaine Helwig

Video (free download) at www.thenew3rseducationconsulting.com

WHEN to teach the "'Making' Numeracy Skills per Grade Level"												
Grade	Making 1 (Level A & B)	Making 10 (Mod. for 1 st & 2 nd grades)	Making 100 (Level A) (Mod. for 2 nd grade)	Making 100 (Level B & C)	Making 1,000 (Level A & B)	Making 10,000 (Level A & B)						
Grade 1		🗸 (Mod)										
Grade 2		✓ (Mod)	🗸 (Mod)									
Grade 3		\checkmark	\checkmark		🗸 (A only)	✓ (A only)						
Grade 4	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark						
Grade 5	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark						
Grade 6	✓	✓	\checkmark	\checkmark	\checkmark	\checkmark						

Table of Contents of "Making" Numeracy Skills' Practice

• Resource Recommendations for Effective Use (i - v)

1st Grade:

- Making 10 w Dots (P1 & P2) Pgs. 1 4 (Not timed)
- Making 10 w Equations (P1 P3) Pgs. 5 10 (Not timed)
- Making 10 w/o Equations (P1 & P2) Pgs. 11 14 (3 min.)

2nd Grade: (5 minutes on all assessments.)

- Making 10 w/o Equations (P1 & P2) Pgs. 15 18
- Making 100 w/o Equations (P1 & P2) Pgs. 19 22

<u>3rd Grade thru 6th Grade:</u> (5 minutes on all assessments.)

- Making 10 w/o Equations (P1 & P2) Pgs. 23 26
- Making 100 (Levels A, B & C) Pgs. 27 32
- Making 1,000 (Levels A & B) Pgs. 33 36
- Making 10,000 (Levels A & B) Pgs. 37 40
- Making 1 (1.00) (Levels A & B) Pgs. 41 44

NOTE 1 – P1, P2 or P3 indicates multiple versions of same practice (P) sheet.

NOTE 2 – Black star on answer key denotes student MASTERY level in time limit.

NOTE 3 – Use IEP for appropriate resource sheet for students in special education

Resource Recommendations for Effective Use

My video series will clarify the pedagogical process so that many common missteps are avoided, and teachers of all experience levels are successful and effective with the implementation of curricular resources. In my 30 years of public education experience, I have seen many efficiently and effectively designed Tier 1, Tier 2 and Tier 3 curricular resources and pedagogy **not work** due to user-error and inefficient classroom routines and student management – either in an individual classroom or school-wide programming. If there is one curricular resource does not work with my students." Then, in response to that negative critique, I followed-up and observed both the curricular resource's implementation as well as the classroom quality controls. Invariably, I arrive at the conclusion, "Of course, the curricular resource or program was not effective – the cause – poorly designed implementation, lack of required consistency and insufficient student accountability." Again, this video series provides the needed steps to rectify or greatly lessen many of these issues.

In general, the video series in math, science and literacy will focus on the four (4) primary phases of 'student learning' and 'pedagogy' that must be addressed to produce consistent and sustained student outcomes.

First, skill or process lesson design must be sequenced from <u>tactile</u> lessons as new concepts are introduced and transition to <u>pictorial</u> representation lessons. After the tactile and pictorial stages are student mastered, the lesson design transitions to a <u>paper-pencil</u> formatted structure. In short, daily core lessons begin with a concrete stage and/or pictorial stage and end in a paper-pencil structure depending on the concept and the grade level.

Second, there must be a <u>threshold number of repetitions</u> to master a skill or process. There are varying means of spiraling instruction to accomplish the threshold repetition limits, but if the objective is to ingrain the skill into long-term memory, repeated exposure is a necessity. For students classified as 'general education' scholars, the range is between 8 to 16 iterations to master a skill or process. However, if the student is receiving special education services, then the minimum required repetitions may vary widely. In those situations, a student's defined disability must be taken into account as well as the student's Individual Education Plan (IEP).

Third, there is always a <u>sequencing hierarchy in skill development</u> since skills must be learned in a specific order, or the majority of students will be cognitively overwhelmed. For example, a student should possess whole number line mastery prior to learning to 'round' whole numbers to the nearest 10, 100 or thousand. These prerequisite skills should be taken into consideration so the student is not trying to learn both the prerequisite skills and the dependent skills simultaneously.

Fourth, the <u>pedagogical spiraling mechanism</u> to achieve the threshold number of repetitions is difficult for teachers of any experience level. There is a teaching method entitled 'spaced repetition' that efficiently and effectively addresses this situation. That technique will be the subject of a future video. However, this resource packet is intended to provide a classroom teacher with most of the prerequisite skills, processing skills and their sequencing referenced in the video; consequently, only the repetition pedagogy remains an open question.

Each of the prerequisite or core skills referenced in the video are detailed below from either the pictorial or paper-pencil stage of lesson design and student learning. Finally, teachers MUST practice the skills sufficiently to aptly prepare students for the student assessment. All too often the lack of student learning and subsequent content mastery in many teachers' classrooms are a result of insufficient practice opportunities.

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Curricular Resources Included for this Video

FIRST GRADE

1.) Making 10 with Dots (P1 & P2) – This pictorial exercise has two Practice versions (P1 and P2) to provide students with sufficient practice. Each of the two versions is divided in half so the teacher can employ the resource for 4 days instead of 2. However, before using this pictorial exercise with students, it is highly recommended that teachers design core lessons with tactile manipulatives to 'Make 10' for at least 4 to 5 days. Some common objects are small plastic disks, blocks or pennies (since a penny is equal to 1 cent). A pictorial exercise like this resource should always follow tactile lessons when new concepts are introduced.

When using this resource, students should equate an associated addition math fact (e.g., $3 + _$ = 10) with each dot diagram picture. On both P1 and P2, the addition equation associated with a missing addend is located under each dot diagram. After students master this resource, the teacher can employ a quick rapid mini-review prior to the core lesson using hands as the visual manipulative to further reinforce the Making 10 concept – each day until the students master the skill. For instance, the teacher can show students 9 digits on his or her two hands, and the students respond by showing 1 finger – to make a sum of 10 (i.e., 9 + 1 = 10).



It is important that teachers begin this **<u>daily</u>** activity by choosing numbers close to 10; consequently, at the beginning, he or she would visually display <u>**only**</u> three numbers (i.e., 8, 9, and 10 digits) – or the students view too many number pairings, and will not be exposed to a sufficient number of repetitions to memorize the pairings to automaticity (10, 0 and 9, 1 and 8, 2). Additionally, the students are only adding a small number (fingers) to 'Make 10.' Then, after 3 days, the teacher can add two more numbers (i.e., 6 and 7) and continue to practice Making 10 with the numbers 8, 9 and 10. Continue the process until all the number combinations have been covered from 0 through 10. It is one of the teacher's objectives that students begin to recognize number pairings to sum or make 10 - (0, 10); (1, 9); (2, 8); (3, 7); (4, 6) and (5, 5). In doing so, students mentally pair a combination of 1-digit numbers that sum to 10 with automaticity. **Emphasize these number patterns**. **Note:** The teacher should be observing students that struggle during these mini-lessons, so that they know which children may require more assistance to master this important Base 10 numeracy content. Again, automaticity with physical understanding is the overriding goal!

- **2.)** Making 10 with Equations (P1 P3) This <u>P</u>ractice exercise is the next sequential learning step in the Making 10 series for 1st graders. Students begin 'Making 10' using addition equations – completing the addend in the equation. The teacher is encouraged to press students on the pragmatic meaning of commutative property of addition during this activity – so students realize the following commutative mathematic property: 4 + 6 = 10 as does, 6 + 4 = 10 (i.e., addends can be exchanged and the sum does NOT change. Finally, the six (6) individual math facts learned in 'Making 10' aid students in learning their addition math facts from 0 through 12 to automaticity.
- 3.) Making 10 <u>without</u> Equations (P1 P3) The final learning stage in 'Making 10' (for first graders) is mental math. Students are given a digit from zero (0) through ten (10), and they <u>write</u> its Copyright © 2023, Celestial Numeracy
 ii

compatible pair. Again, it is recommended that the teacher sufficiently practice each morning for short and rapid practice sessions, so that students master this important numeracy skill.

A methodology that is highly effective in aiding and preparing students in this activity is the following example: A teacher holds up her hand(s) displaying 8 fingers and students **WRITE** 2 on their paper or on their desk with dry erase markers. With first graders, it may take up to two (2) weeks to sufficiently prepare them for this last **P**ractice resource. Again, start the process by ONLY using larger numbers equal or close to the number 10 (i.e., 10, 9 and 8). Then, systematically add a number or two (e.g., 6 and/or 7) every 3 days – while continuing to practice the previously learned numbers as well. When ALL students are ready, assess their 'Making 10' numeracy ability with P1, P2, and P3. Additionally, one of the three (3) **P**ractice exercises can be used as homework to provide extra opportunities for repetition to ensure student success. The recommended time limit to finish this exercise is **3 minutes**. **Note:** If teachers adequately prepare their students for an assessment of any type, time limits on activities are rarely a stressor for students.



1.) Making 10 without Equations (P1 & P2) – If students are computationally prepared for this activity, then assess them using <u>P</u>ractice exercises P1 or P2 for 5 minutes. If not, teachers can use the same pedagogical process that was used for first graders in 3.) Making 10 without Equations (P1 – P3) outlined above. When students are sufficiently prepared for success, then and only then, assess the students.

Note: In my nearly 30 years of public education experience, as either a classroom teacher or a campus administrator, I never witnessed a student that experienced an 'anxiety issue' with a timed test. I believe the reason for this success is that children were properly prepared for the assessment. They were not nervous or under pressure to perform. They were comfortable with the expectation, and again, <u>they were sufficiently prepared and practiced for success</u>. Consequently, it is imperative that a teacher <u>NOT</u> assess students with (P1 or P2) until they have sufficiently practiced the skill with them. Then, it is easy to motivate and praise them on their efforts and accomplishments until they are all successful.

2.) Making 100 without Equations (P1 & P2) – This exercise (P1 and P2) is usually the first-time students begin to understand the numeracy power of Base 10. After students have mastered summing two single digit numbers to 10, they soon realize that it is the SAME mathematical process for summing two numbers to Make 1.00, 100 or 1,000 except we add zeros behind the two numbers (e.g., 3 + 7 = 10; 30 + 70 = 100; 300 + 700 = 1,000 or 0.3 + 0.7 = 1.0). Prepare students in the same manner as described in Making 10 above; however, it is highly effective for students to count by multiples of tens both by chorally SPEAKING and WRITING the multiple string. For example, the teacher can say let's count by multiples of tens – and students respond chorally by counting by tens: {0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100}. Repeat exercise, but students WRITE the multiples of ten on a piece of paper or on their desks using dry erase markers. When students are prepared for success, assess them on this exercise with a 5-minute time limit.

Note: Again, teachers should stress to students that 4 + 6 = 10 and 40 + 60 = 100 and 400 + 600 = 1,000. The important point is that students realize that the number pairs (4 and 6) to Make

10 are the same number pairs to Make 100 (40 and 60), etc. Finally, addition possesses a commutative property that allow addends to be interchanged and not alter the sum (e.g., 30 + 70 = 100 and 70 + 30 = 100).

Note: The first digit in all multiple patterns is always zero (0). Thus, when students count by tens or any other number, the first digit is always zero (0), and then the number (e.g., multiples of 10: **0**, 10, 20, 30, ... or multiples of 2: **0**, 2, 4, 6,...)

THIRD THROUGH SIX GRADE

1.) Making 10 without Equations (P1 & P2) – This exercise begins with mental math. If students have not been prepared in the primary grades, then the teacher may have to revisit those activities listed above prior to assessing students. The recommended time for completion is 5 minutes. Again, it is important to note that if students are amply prepared for an assessment, a time limit is rare as a stressor. If students are not doing well on any assessment or exercise, the only question that remains is the level of their preparation. (Third grade and up)

Note: It is imperative that students master this skill prior to moving on to Making 100.

2.) Making 100 (Levels A, B and C) - These three Levels (A, B, and C) with multiple Practice versions for each level are critical for students' general numeracy ability and an understanding of Base 10 mechanics. Each Level builds the foundation for the next stage and ensures student success. Recommended time limit: 5 minutes.

Level A presses students to Make 100 using only multiples of 10. Again, recognize that this exercise is also 'Making 10' – but adding a zero. (2 + 8 = 10; therefore, 20 + 80 = 100). (Third grade and up)

Level B presses students to Make 100 using only multiples of 10 and a midpoint, so they are only counting up by a 5. (4th grade and up)

Example: Make 100, beginning at 35: <u>Ones first</u> – 35 to 40 is <u>5</u>; then, Tens – 40 to 100 is <u>60</u>. Consequently, 5 + 60 = 65. I recommend using a number line approach to visually reinforce students' physical understanding of the process:



Level C presses students to Make 100 using any singular point between 0 and 100. (4th grade and up)

Example: Make 100, beginning at 23: Ones first – 23 to 30 is 7; then, Tens – 30 to 100 is 70. Consequently, 7 + 70 = 77. Again, as in Level B, I recommend using a number line approach to visually reinforce students' physical understanding of the process:



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3.) Making 1,000 (Levels A and B) – These two Levels (A and B) with multiple <u>P</u>ractice versions augment students' general numeracy ability and expand their understanding of Base 10 mechanics. Level A is multiples of 100; whereas, Level B are the midpoints between 100 (e.g., 50, 150, 250, 350, etc.) The same pedagogical process and sequential process should be followed for Making 100 (Levels A, B, and C) described above. Recommended time limit is 5 minutes. (Third Grade (only) on Level A)

Example: Make 1,000, beginning at 450: <u>Tens first</u> – 450 to 500 is <u>50</u>; <u>then, hundreds</u> – 500 to 1,000 is <u>500</u>. Consequently, $50 + 500 = \underline{550}$. Again, when using Level B, I recommend using a number line approach to visually reinforce students' physical understanding of the process:



4.) Making 10,000 (Levels A and B) – Level A is multiples of 1,000; whereas, Level B includes the midpoints between 1,000 (e.g., 500; 1,500; 2,500; 3,500; etc.) The same pedagogical and sequential process should be followed for Making 100 and 1,000 as outlined above. Recommended time limit: 5 minutes. Note the star ★ indicates the expected completion of this exercise. (Optional exercise in Making 10 series – Third Grade (only) on Level A)

Note: Usually at this point in the Making series, students can be given the Making 10,000 assessments directly if student mastery standards have been maintained throughout the instructional and student preparation process.

5.) Making 1.00 (Levels A and B) – Level A is used to master the nearest tenth; whereas, Level B may be the location of any 0.01 point between 0 and 1.00. <u>This exercise is critical</u> for students to mentally compute the distances between quarter points and whole numbers when working with decimal numbers. It also presses that Base 10 number mechanics apply to both whole numbers and decimals. Recommended time limit is 5 minutes. (4th grade and up)

Example: Make 1.00, beginning at 0.27: <u>Hundredths first</u> – 0.27 to 0.30/0.3 is **0.03**; <u>then</u>, <u>tenths</u> – 0.30/0.3 to 1.00 is **0.7 or 0.70**. Consequently, 0.03 + 0.70 = 0.73. Again, it is strongly recommended to thoroughly practice with a number line approach to visually reinforce students' physical understanding of the process:



Note: With sufficient learning opportunities, students become very adept at these numeracy activities and cement their understanding of Base 10 mathematics and its inherent power.

Note: It is often an elementary school's goal to increase their children's numeracy ability. If that objective is to be realized, numeracy must be directly addressed and practiced with student accountability.

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First (1st) Grade Resources

Video (free download) at www.thenew3rseducationconsulting.com

Use for Addition – Developing Numeracy Sense – Base 10

Directions: Calculate the number of dots to needed to "Make 10" or sum to 10.

















Directions: Calculate the number of dots to needed to "Make 10" or sum to 10.











4 + = 10







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1

Answer Key

Use for Addition – Developing Numeracy Sense – Base 10

Answer Key

Directions: Calculate the number of dots to needed to "Make 10" or sum to 10.

















Directions: Calculate the number of dots to needed to "Make 10" or sum to 10.











4 + 6 = 10







Use for Addition – Developing Numeracy Sense – Base 10

Directions: Calculate the number of dots to needed to "Make 10" or sum to 10.

















Directions: Calculate the number of dots to needed to "Make 10" or sum to 10.











5 + = 10







Use for Addition – Developing Numeracy Sense – Base 10

Directions: Calculate the number of dots to needed to "Make 10" or sum to 10.

















Directions: Calculate the number of dots to needed to "Make 10" or sum to 10.











5 + 5 = 10







^{1.)}
$$3 + 7 = 10$$
 ^{2.)} $9 + 1 = 10$ ^{3.)} $2 + = 10$
^{4.)} $5 + = 10$ ^{5.)} $10 + = 10$ ^{6.)} $7 + = 10$
^{7.)} $+ 9 = 10$ ^{8.)} $+ 6 = 10$ ^{9.)} $2 + = 10$
^{10.)} $10 + = 10$ ^{11.)} $7 + = 10$ ^{12.)} $+ 9 = 10$
^{13.)} $+ 2 = 10$ ^{14.)} $+ 6 = 10$ ^{15.)} $5 + = 10$
^{14.)} $+ 6 = 10$ ^{15.)} $5 + = 10$
^{16.)} $3 + = 10$ ^{17.)} $2 + = 10$ ^{18.)} $+ 9 = 10$
^{16.)} $3 + = 10$ ^{17.)} $2 + = 10$ ^{18.)} $+ 9 = 10$
^{16.)} $3 + = 10$ ^{17.)} $2 + = 10$ ^{18.)} $+ 9 = 10$
^{16.)} $3 + = 10$ ^{17.)} $2 + = 10$ ^{18.)} $+ 9 = 10$
^{16.)} $3 + = 10$ ^{17.)} $2 + = 10$ ^{18.)} $+ 9 = 10$

Making 10 Directions: Fill in each box so the two numbers SUM to a total of 10.

¹⁾
$$3 + 7 = 10$$
 ²⁾ $9 + 1 = 10$ ³⁾ $2 + 8 = 10$
⁴⁾ $5 + 5 = 10$ ⁵⁾ $10 + 0 = 10$ ⁶⁾ $7 + 3 = 10$
⁷⁾ $1 + 9 = 10$ ⁸⁾ $4 + 6 = 10$ ⁹⁾ $2 + 8 = 10$
¹⁰⁾ $10 + 0 = 10$ ¹¹⁾ $7 + 3 = 10$ ¹²⁾ $1 + 9 = 10$
¹³⁾ $8 + 2 = 10$ ¹⁴⁾ $4 + 6 = 10$ ¹⁵⁾ \bigstar $5 + 5 = 10$
¹⁶⁾ $3 + 7 = 10$ ¹⁷⁾ $2 + 8 = 10$ ¹⁸⁾ $1 + 9 = 10$
¹⁶⁾ $3 + 7 = 10$ ¹⁷⁾ $2 + 8 = 10$ ¹⁸⁾ $1 + 9 = 10$
¹⁶⁾ $3 + 7 = 10$ ¹⁷⁾ $2 + 8 = 10$ ¹⁸⁾ $1 + 9 = 10$
¹⁶⁾ $3 + 7 = 10$ ¹⁷⁾ $2 + 8 = 10$ ¹⁸⁾ $1 + 9 = 10$
¹⁶⁾ $4 + 6 = 10$ ¹⁸⁾ $1 + 9 = 10$

6

Making 10 Directions: Fill in each box so the two numbers SUM to a total of 10.

$$\begin{array}{c} 1.1 \\ 6 + \boxed{4} = 10 \\ \end{array}^{2.1} \boxed{1} + 9 = 10 \\ \end{array}^{3.1} 4 + \boxed{10} = 10 \\ \end{array}^{3.1} 6 + \boxed{10} = 10 \\ \end{array}^{3.1} 6 + \boxed{10} \\ \end{array}^{3.1} \boxed{10} + 8 = 10 \\ \end{array}^{3.1} \boxed{14.1} \\ \boxed{14.1} \\ + 4 = 10 \\ \end{array}^{3.1} \boxed{15.1} \\ + 8 = 10 \\ \end{array}^{3.1} \boxed{14.1} \\ \boxed{14.1} \\ + 4 = 10 \\ \end{array}^{3.1} \boxed{14.1} \\ + 4 = 10 \\ \end{array}^{3.1} \boxed{14.1} \\ + 4 = 10 \\ \end{array}^{3.1} \boxed{14.1} \\ + 6 = 10 \\ \boxed{16.1} \\ + 6 = 10 \\ \end{array}^{3.1}$$

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Making 10 Directions: Fill in each box so the two numbers SUM to a total of 10.

¹⁾
$$6 + 4 = 10$$
²⁾ $1 + 9 = 10$
³⁾ $4 + 6 = 10$
⁴⁾ $8 + 2 = 10$
⁵⁾ $10 + 0 = 10$
⁶⁾ $6 + 4 = 10$
⁷⁾ $5 + 5 = 10$
⁸⁾ $3 + 7 = 10$
⁹⁾ $8 + 2 = 10$
¹⁰⁾ $10 + 0 = 10$
¹¹⁾ $7 + 3 = 10$
¹²⁾ $9 + 1 = 10$
¹³⁾ $2 + 8 = 10$
¹⁴⁾ $6 + 4 = 10$
¹⁵⁾ \bigstar
¹⁵⁾ \bigstar
¹⁶⁾ $7 + 3 = 10$
¹⁷⁾ $8 + 2 = 10$
¹⁸⁾ $4 + 6 = 10$

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Making 10 Directions: Fill in each box so the two numbers SUM to a total of 10.

¹⁾
$$5 + 5 = 10$$
²⁾ $1 + 9 = 10$
³⁾ $3 + = 10$
⁴⁾ $9 + = 10$
⁵⁾ $0 + = 10$
⁶⁾ $10 + = 10$
⁷⁾ $+ 3 = 10$
⁸⁾ $+ 5 = 10$
⁹⁾ $6 + = 10$
¹⁰⁾ $10 + = 10$
¹¹⁾ $3 + = 10$
¹²⁾ $+ 2 = 10$
¹³⁾ $+ 9 = 10$
¹⁴⁾ $+ 8 = 10$
¹⁵⁾ $5 + = 10$
¹⁶⁾ $3 + = 10$
¹⁶⁾ $3 + = 10$
¹⁷⁾ $2 + = 10$
¹⁸⁾ $+ 6 = 10$

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Making 10 Directions: Fill in each box so the two numbers SUM to a total of 10.

^{1.)}
$$5 + 5 = 10$$
 ^{2.)} $1 + 9 = 10$ ^{3.)} $3 + 7 = 10$
^{4.)} $9 + 1 = 10$ ^{5.)} $0 + 10 = 10$ ^{6.)} $10 + 0 = 10$
^{7.)} $7 + 3 = 10$ ^{8.)} $5 + 5 = 10$ ^{9.)} $6 + 4 = 10$
^{10.)} $10 + 0 = 10$ ^{11.)} $3 + 7 = 10$ ^{12.)} $8 + 2 = 10$
^{13.)} $1 + 9 = 10$ ^{14.)} $2 + 8 = 10$ ^{15.)} \bigstar $5 + 5 = 10$
^{16.)} $3 + 7 = 10$ ^{17.)} $2 + 8 = 10$ ^{18.)} $4 + 6 = 10$

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10	0	8		7		6	
5	5	4		6		7	
8	2	3		8		5	
4	6	5		2		4	
2		2		5		10	
5		4		0		9	
3		9		8		2	
1		3		2		6	
8		7		5		3	
0		4		3		8	

10	0	8	2	7	<u>3</u>		6	<u>4</u>
5	5	4	<u>6</u>	6	<u>4</u>		7	3
8	2	3	<u>7</u>	8	2		5	5
4	6	5	<u>5</u>	2	<u>8</u>		4	<u>6</u>
2	<u>8</u>	2	<u>8</u>	5	<u>5</u>		10	0
5	5	4	<u>6</u>	0	<u>10</u>		9	1
3	<u>7</u>	9	1	8	2		2	8
1	<u>9</u>	3	<u>7</u>	2	<u>8</u>		6	4
8	2	7	<u>3</u>	5	5		3	<u>7</u>
0	<u>10</u>	4	<u>6</u>	3	<u>7</u>	*	8	2

0	10	7		6		2	
3	7	5		4		7	
8	2	2		9		1	
4	6	8		2		3	
6		1		5		9	
2		3		1		2	
10		0		8		0	
3		4		2		5	
5		6		0		9	
1		5		2		3	

0	10	7	<u>3</u>	6	<u>4</u>		2	<u>8</u>
3	7	5	<u>5</u>	4	<u>6</u>		7	<u>3</u>
8	2	2	<u>8</u>	9	1		1	<u>9</u>
4	6	8	2	2	<u>8</u>		3	<u>7</u>
6	<u>4</u>	1	<u>9</u>	5	<u>5</u>		9	1
2	<u>8</u>	3	<u>7</u>	1	<u>9</u>		2	<u>8</u>
10	<u>0</u>	0	<u>10</u>	8	2		0	<u>10</u>
3	<u>7</u>	4	<u>6</u>	2	<u>8</u>		5	<u>5</u>
5	<u>5</u>	6	<u>4</u>	0	<u>10</u>		9	1
1	<u>9</u>	5	<u>5</u>	2	<u>8</u>	*	3	<u>7</u>

Second (2nd) Grade Resources

Video (free download) at www.thenew3rseducationconsulting.com

	0	7		1		4	
2	8	0		6		7	
6	4	3				1	
7	3	5		2		4	
1		2		5		10	
5		1		1		9	
4		9		8		2	
3		3		2		6	
2		7		0		3	
1		4		3		8	
2		3		5		5	
1		1		3		1	
5		9		7		7	
0		4		2		2	
2		5		6		9	
4		6		4		2	
7		9		8		4	

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		-		-		-	-	
	0		7	<u>3</u>	1	<u>9</u>	4	<u>6</u>
2	8		0		6	4	7	3
6	4		3	<u>7</u>		<u>0</u>	1	<u>9</u>
7	3		5	<u>5</u>	2	<u>8</u>	4	<u>6</u>
1	<u>9</u>		2	<u>8</u>	5	5	10	<u>0</u>
5	<u>5</u>		1	<u>9</u>	1	<u>9</u>	9	1
4	<u>6</u>		9	1	8	2	2	<u>8</u>
3	<u>7</u>		3	<u>7</u>	2	8	6	4 ★
2	<u>8</u>		7	<u>3</u>	0		3	7
1	<u>9</u>		4	<u>6</u>	3	<u>7</u>	8	2
2	<u>8</u>		3	<u>7</u>	5	5	5	5
1	<u>9</u>		1	<u>9</u>	3	7	1	<u>9</u>
5	<u>5</u>		9	1	7	<u>3</u>	7	<u>3</u>
0	<u>10</u>		4	<u>6</u>	2	<u>8</u>	2	8
2	<u>8</u>		5	5	6	4	9	1
4	<u>6</u>		6	<u>4</u>	4	<u>6</u>	2	<u>8</u>
7	<u>3</u>		9	1	8	2	4	<u>6</u>

	0	8	1	4
6	4	5	4	7
8	2	2	7	1
3	7	8	2	3
6		1	5	9
5		9	1	1
2		0	8	0
3		4	2	2
2		6	0	9
1		5	3	3
0		8	5	1
2		0	7	5
8		3	6	6
5		9	2	1
9		2	6	2
2		4	4	3
5		6	8	6

	0	8	2	1	<u>9</u>	4	<u>6</u>
6	4	5	<u>5</u>	4	<u>6</u>	7	<u>3</u>
8	2	2	<u>8</u>	7	<u>3</u>	1	<u>9</u>
3	7	8	2	2	<u>8</u>	3	<u>7</u>
6	4	1	<u>9</u>	5	<u>5</u>	9	1
5	<u>5</u>	9	1	1	<u>9</u>	1	<u>9</u>
2	<u>8</u>	0		8	2	0	
3	<u>7</u>	4	<u>6</u>	2	<u>8</u>	2	<u>8</u> ★
2	<u>8</u>	6	<u>4</u>	0		9	1
1	<u>9</u>	5	<u>5</u>	3	<u>7</u>	3	<u>7</u>
0		8	2	5	<u>5</u>	1	<u>9</u>
2	<u>8</u>	0		7	<u>3</u>	5	<u>5</u>
8	2	3	<u>7</u>	6	<u>4</u>	6	<u>4</u>
5	5	9	1	2	<u>8</u>	1	<u>9</u>
9	1	2	<u>8</u>	6	<u>4</u>	2	<u>8</u>
2	<u>8</u>	4	<u>6</u>	4	<u>6</u>	3	<u>7</u>
5	<u>5</u>	6	<u>4</u>	8	2	6	4

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0	100	10	50	60
90	10	40	70	80
30	70	30	0	10
10	90	50	20	40
60		20	50	100
20		10	10	90
50		90	80	20
30		30	20	60
80		70	0	30
10		40	30	80
20		30	50	50
40		10	30	10
50		90	70	70
0		40	20	20
20		50	60	90
10		60	20	20
50		10	0	40
	0 90 30 10 60 20 50 30 80 10 20 40 50 20 40 50 20 10 50	01009010307010906090609050903090309030903090309030905090109020903090109010901090109050901090509050905090509010905090 </td <td>01001090104030703030705060202020109050903030703030703010401020103010903050901010505010605010105010501010</td> <td>0 100 10 40 70 90 10 40 70 70 30 70 30 0 0 10 90 50 20 20 60 20 50 20 50 20 10 10 10 10 50 90 30 20 80 30 90 30 20 10 50 90 30 20 10 30 70 0 10 30 30 70 0 30 10 10 40 30 50 10 40 90 70 30 10 50 90 70 20 10 20 50 60 10 20 10 50 60 20 10 10 60 20 10 0</td>	01001090104030703030705060202020109050903030703030703010401020103010903050901010505010605010105010501010	0 100 10 40 70 90 10 40 70 70 30 70 30 0 0 10 90 50 20 20 60 20 50 20 50 20 10 10 10 10 50 90 30 20 80 30 90 30 20 10 50 90 30 20 10 30 70 0 10 30 30 70 0 30 10 10 40 30 50 10 40 90 70 30 10 50 90 70 20 10 20 50 60 10 20 10 50 60 20 10 10 60 20 10 0

Making 100 Directions: Fill in each box so the two numbers SUM to 100.

			-		-	
0	100	10	<u>90</u>	50	<u>50</u>	60
90	10	40	<u>60</u>	70	<u>30</u>	80
30	70	30	<u>70</u>	0	<u>100</u>	10
10	90	50	<u>50</u>	20	<u>80</u>	40
60	<u>40</u>	20	<u>80</u>	50	<u>50</u>	100
20	<u>80</u>	10	<u>90</u>	10	<u>90</u>	90
50	<u>50</u>	90	<u>10</u>	80	<u>20</u>	20
30	<u>70</u>	30	<u>70</u>	20	<u>80</u>	60
80	<u>20</u>	70	<u>30</u>	0	<u>100</u>	30
10	<u>90</u>	40	<u>60</u>	30	<u>70</u>	80
20	<u>80</u>	30	<u>70</u>	50	<u>50</u>	50
40	<u>60</u>	10	<u>90</u>	30	<u>70</u>	10
50	<u>50</u>	90	<u>10</u>	70	<u>30</u>	70
0	<u>100</u>	40	<u>60</u>	20	<u>80</u>	20
20	<u>80</u>	50	<u>50</u>	60	<u>40</u>	90
10	<u>90</u>	60	<u>40</u>	20	<u>80</u>	20
50	<u>50</u>	10	<u>90</u>	0	<u>100</u>	40

40

<u>20</u>

<u>90</u>

60

0

10

<u>80</u>

<u>40</u>★

<u>70</u>

<u>20</u>

<u>50</u>

<u>90</u>

<u>30</u>

<u>80</u>

<u>10</u>

<u>80</u>

60

			_				
100	0	40		20		50	
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20		60	Ī	0		90	
50		30	Ī	90		30	
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20		0	Ī	70		50	
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90		20		60		20	
0		40		50		30	
80		30		80		90	

		-			-			•		
100	0		40	<u>60</u>		20	<u>80</u>		50	<u>50</u>
70	30		50	<u>50</u>		40	<u>60</u>		70	<u>30</u>
20	80		20	<u>80</u>		70	<u>30</u>		10	<u>90</u>
10	90		80	<u>20</u>		20	<u>80</u>		30	<u>70</u>
60	<u>40</u>		10	<u>90</u>		50	<u>50</u>		90	<u>10</u>
30	<u>70</u>		90	<u>10</u>		10	<u>90</u>		10	<u>90</u>
40	<u>60</u>		0	<u>100</u>		80	<u>20</u>		0	<u>100</u>
0	<u>100</u>		40	<u>60</u>		20	<u>80</u>		20	<u>80</u> ≯
20	<u>80</u>		60	<u>40</u>		0	<u>100</u>		90	<u>10</u>
50	<u>50</u>		30	<u>70</u>		90	<u>10</u>		30	<u>70</u>
100	<u>0</u>		80	<u>20</u>		50	<u>50</u>		10	<u>90</u>
20	<u>80</u>		0	<u>100</u>		70	<u>30</u>		50	<u>50</u>
80	<u>20</u>		30	<u>70</u>		60	<u>40</u>		60	<u>40</u>
50	<u>50</u>		90	<u>10</u>		20	<u>80</u>		10	<u>90</u>
90	<u>10</u>		20	<u>80</u>		60	<u>40</u>		20	<u>80</u>
0	<u>100</u>		40	<u>60</u>		50	<u>50</u>		30	<u>70</u>
80	<u>20</u>		30	<u>70</u>	1	80	<u>20</u>		90	<u>10</u>

Third thru Sixth (3rd – 6th) Grade

Video (free download) at www.thenew3rseducationconsulting.com

7	
6	
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and the second se	

<u>Directions:</u> Fill in each box so the two numbers SUM to 10.

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Available at Formative Loop

<u>Directions:</u> Fill in each box so the two numbers SUM to 10.

10	0
9	1
4	6
7	3
6	<u>4</u>
2	<u>8</u>
4	<u>6</u>
3	<u>7</u>
9	<u>1</u>
1	<u>9</u>
0	<u>10</u>
3	<u>7</u>
6	<u>4</u>
9	<u>1</u>
1	<u>9</u>
5	<u>5</u>
8	<u>2</u>
2	<u>8</u>
1	<u>9</u>
5	<u>5</u>
0	<u>10</u>
2	<u>8</u>
4	<u>6</u>
7	<u>3</u>

8	<u>2</u>
4	<u>6</u>
3	<u>7</u>
5	<u>5</u>
2	<u>8</u>
1	<u>9</u>
9	<u>1</u>
3	<u>7</u>
7	<u>3</u>
4	<u>6</u>
5	<u>5</u>
2	<u>8</u>
6	<u>4</u>
8	<u>2</u>
0	<u>10</u>
2	<u>8</u>
7	<u>3</u>
3	<u>7</u>
1	<u>9</u>
9	<u>1</u>
4	<u>6</u>
5	<u>5</u>
6	<u>4</u>
•	1

7	<u>3</u>
6	<u>4</u>
8	<u>2</u>
2	<u>8</u>
5	<u>5</u>
1	<u>9</u>
8	<u>2</u>
2	<u>8</u>
0	<u>10</u>
3	<u>7</u>
5	<u>5</u>
7	<u>3</u>
6	<u>4</u>
4	<u>6</u>
8	<u>2</u>
1	<u>9</u>
0	<u>10</u>
5	<u>5</u>
3	<u>7</u>
7	<u>3</u>
2	<u>8</u>
6	<u>4</u>
4	<u>6</u>
8	2

6 $\frac{4}{7}$ 7 $\frac{3}{2}$ 1 $\frac{9}{2}$ 4 $\frac{6}{2}$ 10 $\frac{0}{2}$ 9 $\frac{1}{2}$ 2 $\frac{8}{2}$ 6 $\frac{4}{2}$ 3 $\frac{7}{2}$ 8 $\frac{2}{2}$ 1 $\frac{9}{2}$ 7 $\frac{3}{2}$ 0 $\frac{10}{2}$ 8 $\frac{2}{2}$ 2 $\frac{8}{2}$ 0 $\frac{10}{2}$ 8 $\frac{2}{2}$ $\frac{8}{2}$ $\frac{2}{2}$ $\frac{8}{2}$ $\frac{9}{2}$ $\frac{1}{2}$ $\frac{8}{2}$ 9 $\frac{1}{2}$ $\frac{8}{9}$ $\frac{1}{2}$ $\frac{8}{2}$ $\frac{8}{2}$ $\frac{9}{1}$ $\frac{1}{2}$ $\frac{8}{9}$ $\frac{1}{2}$	-	1
7 $\underline{3}$ 1 $\underline{9}$ 4 $\underline{6}$ 10 $\underline{0}$ 9 $\underline{1}$ 2 $\underline{8}$ 6 $\underline{4}$ 3 $\underline{7}$ 8 $\underline{2}$ 1 $\underline{9}$ 7 $\underline{3}$ 5 $\underline{5}$ 2 $\underline{8}$ 0 $\underline{10}$ 8 $\underline{2}$ 2 $\underline{8}$ 0 $\underline{10}$ 8 $\underline{2}$ 1 $\underline{9}$ 7 $\underline{3}$ 5 $\underline{5}$ 1 $\underline{9}$ 7 $\underline{3}$ 2 $\underline{8}$ 9 $\underline{1}$ 2 $\underline{8}$ 9 $\underline{1}$ 2 $\underline{8}$	6	<u>4</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	7	<u>3</u>
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10 $\underline{0}$ 9 $\underline{1}$ 2 $\underline{8}$ 6 $\underline{4}$ 3 $\underline{7}$ 8 $\underline{2}$ 1 $\underline{9}$ 7 $\underline{3}$ 5 $\underline{5}$ 2 $\underline{8}$ 0 $\underline{10}$ 8 $\underline{2}$ 2 $\underline{8}$ 5 $\underline{5}$ 1 $\underline{9}$ 7 $\underline{3}$ 2 $\underline{8}$ 9 $\underline{1}$ 2 $\underline{8}$ 9 $\underline{1}$ 2 $\underline{8}$ 4 $\underline{6}$	4	<u>6</u>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	<u>0</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	9	1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	<u>8</u>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6	<u>4</u>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	<u>7</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8	<u>2</u>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	<u>9</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	7	<u>3</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	<u>5</u>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	<u>8</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0	<u>10</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8	2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	<u>8</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	<u>5</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	<u>9</u>
$\begin{array}{c c} 2 & \underline{8} \\ \hline 9 & \underline{1} \\ \hline 2 & \underline{8} \\ \hline 4 & \underline{6} \\ \end{array}$	7	<u>3</u>
$\begin{array}{ c c c }\hline 9 & \underline{1} \\ \hline 2 & \underline{8} \\ \hline 4 & \underline{6} \\ \hline \end{array}$	2	<u>8</u>
$2 \frac{8}{6}$	9	1
	2	<u>8</u>
4 ⊻ ×		6.

Fill in each box so the two numbers SUM to 10.

		_	
10	0		
9	1		
0	10		
7	3		
1			
5			
4			
8			
2			
1			
0			
2			
8			
5			
7			
0			
1			
3			
2			
7			
5			
9			
2			
5			

4	
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1	
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2	
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6	

Fill in each box so the two numbers SUM to 10.

10	0
9	1
0	10
7	3
1	<u>9</u>
5	<u>5</u>
4	<u>6</u>
8	<u>2</u>
2	<u>8</u>
1	<u>9</u>
0	<u>10</u>
2	<u>8</u>
8	<u>2</u>
5	<u>5</u>
7	<u>3</u>
0	<u>10</u>
1	<u>9</u>
3	<u>7</u>
2	<u>8</u>
7	<u>3</u>
5	<u>5</u>
9	<u>1</u>
2	<u>8</u>
5	<u>5</u>

4	<u>6</u>
7	<u>3</u>
2	<u>8</u>
3	<u>7</u>
1	<u>9</u>
9	<u>1</u>
0	<u>10</u>
4	<u>6</u>
6	<u>4</u>
5	<u>5</u>
8	<u>2</u>
0	<u>10</u>
3	<u>7</u>
5	<u>5</u>
2	<u>8</u>
1	<u>9</u>
9	<u>1</u>
5	<u>5</u>
2	<u>8</u>
1	<u>9</u>
9	<u>1</u>
2	<u>8</u>
4	<u>6</u>
6	<u>4</u>

4	<u>6</u>
6	<u>4</u>
7	<u>3</u>
2	<u>8</u>
5	<u>5</u>
1	<u>9</u>
8	<u>2</u>
2	<u>8</u>
0	<u>10</u>
3	<u>7</u>
5	<u>5</u>
7	<u>3</u>
6	<u>4</u>
4	<u>6</u>
8	<u>2</u>
1	<u>9</u>
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3	<u>7</u>
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2	<u>8</u>
6	<u>4</u>
4	<u>6</u>
8	<u>2</u>

6	<u>4</u>
7	<u>3</u>
1	<u>9</u>
3	<u>7</u>
9	<u>1</u>
1	<u>9</u>
0	<u>10</u>
2	<u>8</u>
9	<u>1</u>
3	<u>7</u>
1	<u>9</u>
5	<u>5</u>
6	<u>4</u>
7	<u>3</u>
3	<u>7</u>
4	<u>6</u>
9	<u>1</u>
6	<u>4</u>
1	<u>9</u>
8	<u>2</u>
1	<u>9</u>
2	<u>8</u>
3	<u>7</u>
6	4 ★

– Level A

Fill in each box so the two numbers SUM to a total of 100.

		_
100	0	
90	10	
80	20	
70	30	
60		
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40		
30		
20		
10		
0		
30		
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90		
10		
50		
80		
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50		
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80	
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50	
20	
0	
80	
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70	
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90	
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40	

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ng 100 – Level A

Fill in each box so the two numbers SUM to a total of 100.

100	0
90	10
80	20
70	30
60	<u>40</u>
50	<u>50</u>
40	<u>60</u>
30	<u>70</u>
20	<u>80</u>
10	<u>90</u>
0	<u>100</u>
30	<u>70</u>
60	<u>40</u>
90	<u>10</u>
10	<u>90</u>
50	<u>50</u>
80	<u>20</u>
20	<u>80</u>
10	<u>90</u>
50	<u>50</u>
0	<u>100</u>
20	<u>80</u>
40	<u>60</u>
70	<u>30</u>

80	<u>20</u>
40	<u>60</u>
30	<u>70</u>
50	<u>50</u>
20	<u>80</u>
10	<u>90</u>
90	<u>10</u>
30	<u>70</u>
70	<u>30</u>
40	<u>60</u>
50	<u>50</u>
20	<u>80</u>
60	<u>40</u>
80	<u>20</u>
0	<u>100</u>
20	<u>80</u>
70	<u>30</u>
30	<u>70</u>
10	<u>90</u>
90	<u>10</u>
40	<u>60</u>
50	<u>50</u>
60	<u>40</u>
90	10

70	<u>30</u>
60	<u>40</u>
80	<u>20</u>
20	<u>80</u>
50	<u>50</u>
10	<u>90</u>
80	<u>20</u>
20	<u>80</u>
0	<u>100</u>
30	<u>70</u>
50	<u>50</u>
70	<u>30</u>
60	<u>40</u>
40	<u>60</u>
80	<u>20</u>
10	<u>90</u>
0	<u>100</u>
50	<u>50</u>
30	<u>70</u>
70	<u>30</u>
20	<u>80</u>
60	<u>40</u>
40	<u>60</u>
80	<u>20</u>

60	<u>40</u>
70	<u>30</u>
10	<u>90</u>
40	<u>60</u>
100	<u>0</u>
90	<u>10</u>
20	<u>80</u> ★
60	<u>40</u>
30	<u>70</u>
80	<u>20</u>
10	<u>90</u>
70	<u>30</u>
50	<u>50</u>
20	<u>80</u>
0	<u>100</u>
80	<u>20</u>
20	<u>80</u>
50	<u>50</u>
10	<u>90</u>
70	<u>30</u>
20	<u>80</u>
90	<u>10</u>
20	<u>80</u>
40	<u>60</u>

Making 100 – Level B

<u>Hin</u>	<u>t:</u> Add uj	5. Exam	ple: 55 →	► 55 to 60	$) = \underline{5} \rightarrow$	60 to 10	0 = 40 —	→ The	erefore, <u>5</u>	
100	0		95			70			5	
85	15		40			65			70	
70	30		35			85			15	
95	5		55			5			45	
60			25			50			100	
55			15			15			95	
45			90			85			20	
35			5			25			65	
25			75			0			35	
10		¥	40		•	30		*	85	
0			55			55			15	
35			25			75			10	
65			65			65			55	
95			85			45			25	
15			0			85			0	
55			25			15			85	
80			70			0			25	
25			35			5			50	
15			5			35			15	
5			10			75			75	
0			45			25			25	
25			50			65			90	
40			65			45			25	

Making 100 – Level B

Directions:	Fill in ea	ach box so	the tw	o numbers S	SUM	to a total of 100.	
<u>Hint:</u>	Add up.	Example:	55 →	55 to $60 = 5$	-	60 to $100 = 40$ -	→ Therefore, <u>5</u>

100	0
85	15
70	30
95	5
60	40
55	45
45	55
35	65
25	75
10	90
0	100
35	65
65	35
95	5
15	85
55	45
80	20
25	75
15	85
5	95
0	100
25	75
40	60

95	5
40	60
35	65
55	45
25	75
15	85
90	10
5	95
75	25
40	60
55	45
25	75
65	35
85	15
0	100
25	75
70	30
35	65
5	95
10	90
45	55
50	50
65	35

60 to 100 = 40						
70	30					
65	35					
85	15					
5	95					
50	50					
15	85					
85	15					
25	75					
0	100					
30	70					
55	45					
75	25					
65	35					
45	55					
85	15					
15	85					
0	100					
5	95					
35	65					
75	25					
25	75★					
65	35					
45	55					

5	95
70	30
15	85
45	55
100	0
95	5
20	80
65	35
35	65
85	15
15	85
10	90
10 55	90 45
10 55 25	90 45 75
10 55 25 0	90 45 75 100
10 55 25 0 85	90 45 75 100 15
10 55 25 0 85 25	90 45 75 100 15 75
10 55 25 0 85 25 50	90 45 75 100 15 75 50
10 55 25 0 85 25 50 15	90 45 75 100 15 75 50 85
10 55 25 0 85 25 50 15 75	90 45 75 100 15 75 50 85 25
1055250852550157525	904575100157550852575
10 55 25 0 85 25 50 15 75 25 90	90457510015755085257510

Making 100 – Level C

<u>Making 100-C Directions</u>: Fill in each box so the two numbers SUM to a total of 100. <u>*Hint*</u>: Add up. Example: $24 \rightarrow 24$ to $30 = \underline{6} \rightarrow 30$ to $100 = \underline{70} \longrightarrow$ Therefore, $\underline{6} \quad \underline{0}$

		_	-	—				
100	0		92		70		46	
88	12		42		69		70	
70	30		33		88		19	
94	6		17		6		43	
64			25		50		100	
49			15		11		87	
45			90		84		20	
35			3		22		65	
22			78		0		35	
10		ł	41	+	31	¥	72	
0			54		53		11	
37			25		79		10	
61			65		61		5	
99			66		59		27	
15			0		80		0	
59			25		20		85	
80			70		0		25	
29			77		5		50	
9			1		39		19	
3			11		73		79	
0			48	1	25		25	
25			50		78		90	
40			32		46		25	

Making 100 – Level C

<u>Making 100-C Directions:</u> Fill in each box so the two numbers SUM to a total of 100. <u>*Hint*</u>: Add up. Example: $24 \rightarrow 24$ to $30 = 6 \rightarrow 30$ to $100 = 70 \rightarrow$ Therefore, <u>6</u> <u>0</u>

					-		<u> </u>		<u> </u>	
100	0]	92	8		70	30		46	54
88	12		42	58		69	31		70	30
70	30		33	67		88	12		19	81
94	6		17	83		6	94		43	57
64	36		25	75		50	50		100	0
49	51		15	85		11	89		87	13
45	55		90	10		84	16		20	80
35	65		3	97		22	78		65	35
22	78		78	22		0	100★		35	65
10	90] ↓	41	59	↓	31	69	•	72	28
0	100]	54	46		53	57		11	89
37	63]	25	75		79	21		10	90
61	39		65	35		61	39		5	95
99	1		66	34		59	41		27	73
15	85		0	100		80	20		0	100
59	41		25	75		20	80		85	15
80	20		70	30		0	100		25	75
29	71		77	23		5	95		50	50
9	91		1	99		39	61		19	81
3	97		11	89		73	27		79	21
0	100]	48	52		25	75		25	75
25	75]	50	50		78	22		90	10
40	60]	32	68		46	54		25	75
					-			-		

Making 1,000 – Level A

1,000	0	100	700	600
700	300	400	600	700
800	200	300	800	100
200	800	500	200	400
600		200	500	1,000
100		100	100	900
500		900	800	200
300		300	200	600
0		700	0	300
100		400	300	800
900		500	500	100
300		200	700	700
600		600	600	500
900		800	400	200
100		0	800	0
500		200	100	800
800		700	0	200
200		300	500	500
100		100	300	100
500		900	700	700
0		400	200	200
200		500	600	900
400		600	400	200
700		900	800	400

Making 1,000 – Level A

Making 1000-A Directions: Fill in each box so the two numbers SUM to a total of 1000.

1,000	0	100	900	700	300	600	400
700	300	400	600	600	400	700	300
800	200	300	700	800	200	100	900
200	800	500	500	200	800	400	600
600	400	200	800	500	500	1,000	0
100	900	100	900	100	900	900	100
500	500	900	100	800	200	200	800
300	700	300	700	200	800	600	400
0	1,000	700	300	0	1,000	300	700
100	900	400	600	300	700	800	200
900	100	500	500	500	500	100	900
300	700	200	800	700	300	700	300
600	400	600	400	600	400	500	500
900	100	800	200	400	600	200	800
100	900	0	1,000	800	200	0	1,000
500	500	200	800	100	900	800	200
800	200	700	300	0	1,000	200	800
200	800	300	700	500	500	500	500
100	900	100	900	300	700	100	900
500	500	900	100	700	300	700	300
0	1,000	400	600	200	800	200	800
200	800	500	500	600	400	900	100
400	600	600	400	400	600	200	800
700	300	900	100	800	200 ★	400	600

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Making 1,000 – Level B

aa up. Ex	ampie. 23	0 - 230 10 300 = 30 - 100	500 10 1,000 = 700	Therefore, <u>50</u>
850	150	150	750	600
500	500	400	600	50
50	950	350	850	150
250	750	550	50	450
650		250	550	1,000
550		100	1 00	950
400		950	850	250
350		50	250	650
250		750	0	300
150		450	350	950
0		500	550	150
350		1,000	750	750
650		650	700	550
950		850	50	250
150		0	850	0
550		250	150	850
850		750	0	250
250		350	550	550
150		100	350	150
550		950	750	100
50		450	250	250
1,000		550	650	900
450		650	400	250

<u>Making 1,000-B Directions:</u> Fill in each box so the two numbers SUM to a total of 1,000. Add up. Example: $250 \rightarrow 250$ to $300 = 50 \rightarrow 300$ to $1,000 = 700 \longrightarrow$ Therefore, 50 0

Making 1,000 – Level B

auu up. Ex	ample. 23	0 -	250 10 50	$0 = \underline{30}$	500 0	51,000 - 1		THE	elole, <u>50</u>	
850	150		150	850		750	250		600	400
500	500		400	600		600	400		50	950
50	950		350	650		850	150		150	850
250	750		550	450		50	950		450	350
650	350		250	750		550	450		1,000	0
550	450		100	900		1 00	0 ★		950	50
400	600		950	50		850	150		250	750
350	650		50	950		250	750		650	350
250	750		750	250		0	1,000		300	700
150	850		450	350		350	650		950	50
0	1,000		500	500		550	450		150	850
350	650		1,000	0		750	250		750	250
650	350		650	350		700	300		550	450
950	50		850	150		50	950		250	750
150	850		0	1,000		850	150		0	1,000
550	450		250	750		150	850		850	150
850	150		750	250		0	1,000		250	750
250	750		350	650		550	450		550	450
150	850		100	900		350	650		150	850
550	450		950	50		750	250		100	900
50	950		450	350		250	750		250	750
1,000	0		550	400		650	350		900	100
450	600		650	350		400	600		250	750

<u>Making 1,000-B Directions:</u> Fill in each box so the two numbers SUM to a total of 1,000. Add up. Example: $250 \rightarrow 250$ to $300 = 50 \rightarrow 300$ to $1,000 = 700 \longrightarrow$ Therefore, 50 0

Making 10,000 – Level A

0,000-A Directions: Fill in each box so the two numbers SUM to a total of 10,000.

8,000	2,000	1	5 00	6
00	0	4,000	7 00	7 00
2 00	8 00	000	8 00	9 00
9 00	1 00	1 00	9 00	1 00
3		5 00	4 00	10,000
4		7 00	1 00	8 00
7		8 00	10,000	2 00
2		2 00	2 00	5 00
1		6 00	0	4 00
0		10,000	2 00	7 00
3		4 00	4 00	1 00
7		1 00	7 00	6 00
5		6 00	5 00	7 00
3		7 00	3 00	9 00
8		0	1 00	0
9		8 00	6 00	8 00
1		3 00	0	3 00
6		7 00	8 00	4 00
2		9 00	2 00	6 00
8		3 00	5 00	5 00
7		7 00	1 00	3 00
5		4 00	2 00	8 00
4		5 00	3 00	7 00
6		8 00	7 00	3 00

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Making 10,000 – Level A

0,000-A Directions: Fill in each box so the two numbers SUM to a total of 10,000.

8,000	2,000	1	9 00	5 00	5	6	4
00	0	4,000	6	7 00	3	7 00	3
2 00	8 00	000	7	8 00	2	9 00	1
9 00	1 00	1 00	9	9 00	1	1 00	9
3	7	5 00	5	4 00	6	10,000	0
4	6	7 00	3	1 00	9	8 00	2
7	3	8 00	2	10,000	0	2 00	8
2	8	2 00	8	2 00	8	5 00	5
1	9	6 00	4	0	10,000	4 00	6
0	10	10,000	0	2 00	8	7 00	3
3	7,0	4 00	6	4 00	6	1 00	9
7	3	1 00	9	7 00	3	6 00	4
5	5	6 00	4	5 00	5	7 00	3
3	7	7 00	3	3 00	7	9 00	1
8	2	0	10,000	1 00	9	0	10,000
9	1	8 00	2	6 00	4	8 00	2
1	9	3 00	7	0	10,000	3 00	7,000
6	4	7 00	3	8 00	2	4 00	6
2	8	9 00	1	2 00	8	6 00	4
8	2	3 00	7	5 00	5	5 00	5
7	3	7 00	3	1 00	9	3 00	7
5	4	4 00	6	2 00	8	8 00	2
4	6	5 00	5	3 00	7	7 00	3
6	4 00	8 00	2	7 00	3	3 00	★7

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Making 10,000 – Level B

1 /	,	,	 ,	, <u> </u>
8,000 2	2,000	1	4 00	3
8 00 1	1,500	500	7 00	8 00
5 00 4	4,500	8,500	9 00	500
3 00 7	7 00	2 00	1 00	2 00
3		5 00	5 00	10,000
5		7 00	2 00	9 00
9,5		9 00	10,000	3 00
10		8 00	3 00	6 00
2		7 00	0	5 00
0		10,000	1 00	8 00
1		3 00	5 00	1 00
5		2,000	500	500
6		1 00	6 00	6 00
7		8 00	4 00	9,500
5		0	2 00	0
2		4 00	7 00	7,500
8		9 00	0	2 00
7		6 00	9 00	5 00
3		1 00	3 00	1 00
9		4 00	6 00	7 00
5		9 00	2 00	4 00
1		5 00	1 00	9 00
4		3 00	500	2 00

-B Directions: Fill in each box so the two numbers SUM to a total of 10,000. Add up. Ex: $3,500 \rightarrow 3,500$ to $4,000 = 500 \rightarrow 4,000$ to $10,000 = 6,000 \longrightarrow$ So, 500

Making 10,000 – Level B

-											
8,000	2,000	1	8 00		4	00	6 ★		3		6
8 00	1,500	500	9,5		7	00	2		8	00	1,5
5 00	4,500	8,500	1		9	00	5		5	00	9
3 00	7 00	2 00	7,5		1	00	9,0		2	00	7,5
3	6	5 00	4		5	00	4,5		10,	,000,	0
5	9	7 00	2,5		2	00	7,5		9	00	5
9,5	5	9 00	1	1	10,	,000	0		3	00	6,5
10	0	8 00	1		3	00	6,5		6	00	3,5
2	7	7 00	2,5			0	10,000		5	00	5
0	10	10,000	0		1	00	8,5		8	00	1,5
1	8,5	3 00	6		5	00	4,5		1	00	8,5
5	5	2,000	8		5	00	9,5		5	00	9,5
6	3	1 00	8		6	00	3,5		6	00	3,5
7	2	8 00	1,5		4	00	5,5		9,	500	5
5	9,5	0	10,000		2	00	7,5			0	10,000
2	7	4 00	5		7	00	3		7,	500	2
8	1	9 00	5			0	10,000		2	00	8,000
7	3	6 00	3		9	00	5		5	00	4,5
3	6,5	1 00	8,5		3	00	6,5		1	00	8,5
9	1	4 00	6		6	00	3,5		7	00	2,5
5	4	9 00	5		2	00	8		4	00	5,5
1	9	5 00	5		1	00	8,5		9	00	1
4	4,5	3 00	6		5	00	9,5		2	00	7,5
		8						· •			

-B Directions: Fill in each box so the two numbers SUM to a total of 10,000. Add up. Ex: $3,500 \rightarrow 3,500$ to $4,000 = 500 \rightarrow 4,000$ to $10,000 = 6,000 \longrightarrow So, 500$

Making 1 Whole – Level A

		Direction	<u>is:</u> Fill in	
1.00	0		0.80	
0.90	0.10		0.40	
0.80	0.20		0.30	
0.70	0.30		0.50	
0.40			0.20	
0.20			0.10	
0.70			0.90	
0.30			0.30	
1.00			0.70	
0.90			0.40	
0.50			0.50	
0.40			0.20	
0.60			0.60	
0.80			0.80	
0.10			0	
0.90			0.20	
0			0.70	
0.50			0.30	
0.70			1.00	
0.60			0.90	
0.40			0.40	
0.90			0.50	
0.80			0.60	
0.70			0.90	

Directions: Fill in each box so the two numbers SUM to a total of 1.00.

0.70		0.
0.60		0.
0.80		0.
0.20		0.
0.50		1.
0.10		0.
0.80		0.
0.20		0.
0		0.
0.30		0.
0.50		0.
0.70		0.
0.60		0.
0.40		0.
0.80		(
0.10		0.
1.00		0.
0.50		0.
0.30		0.
0.70		0.
0.20		0.
0.60		0.
0.40		0.
0.80		0.

0.60	
0.00	
0.70	
0.10	
0.40	
1.00	
0.90	
0.20	
0.60	
0.30	
0.80	
0.10	
0.70	
0.50	
0.50 0.20	
0.50 0.20 0	
0.50 0.20 0 0.80	
0.50 0.20 0 0.80 0.20	
0.50 0.20 0 0.80 0.20 0.50	
0.50 0.20 0 0.80 0.20 0.50 0.10	
0.50 0.20 0 0.80 0.20 0.50 0.10 0.70	
0.50 0.20 0 0.80 0.20 0.50 0.10 0.70 0.20	
0.50 0.20 0 0.80 0.20 0.50 0.10 0.70 0.20 0.90	
0.50 0.20 0 0.80 0.20 0.50 0.10 0.70 0.20 0.90 0.20	

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Making 1 Whole – Level A

0.20

0.60

0.70

0.50

0.80

0.90

0.10

0.70

0.30

0.60

0.50

0.80

0.40

0.20

1 0

0.80

0.30

0.70

0

0.10

0.60

0.50

0.40

0.10

1.00	0	0.80
0.90	0.10	0.40
0.80	0.20	0.30
0.70	0.30	0.50
0.40	0.60	0.20
0.20	0.80	0.10
0.70	0.30	0.90
0.30	0.70	0.30
1.00	0	0.70
0.90	0.10	0.40
0.50	0.50	0.50
0.40	0.60	0.20
0.60	0.40	0.60
0.80	0.20	0.80
0.10	0.90	0
0.90	0.10	0.20
0	1.00	0.70
0.50	0.50	0.30
0.70	0.30	1.00
0.60	0.40	0.90
0.40	0.60	0.40
0.90	0.10	0.50
0.80	0.20	0.60
0.70	0.30	0.90

Directions: Fill in each box so the two numbers SUM to a total of 1.00.

0.70	0.30	(
0.60	0.40	(
0.80	0.20	(
0.20	0.80	
0.50	0.50	· ·
0.10	0.90	
0.80	0.20	
0.20	0.80	
0	1 0	
0.30	0.70	
0.50	0.50	
0.70	0.30	
0.60	0.40	
0.40	0.60	
0.80	0.20	
0.10	0.90	(
1.00	0	(
0.50	0.50	
0.30	0.70	
0.70	0.30	(
0.20	0.80	(
0.60	0.40	
0.40	0.60	
0.80	0.20	

0.60	0.40	
0.70	0.30	
0.10	0.90	
0.40	0.60	
1.00	0	
0.90	0.10	
0.20	0.80	
0.60	0.40	
0.30	0.70	★
0.80	0.20	
0.10	0.90	
0.70	0.30	
0.50	0.50	
0.20	0.80	
0.20 0	0.80 1 0	
0.20 0 0.80	0.80 1 0 0.20	
0.20 0 0.80 0.20	0.80 1 0 0.20 0.80	
0.20 0 0.80 0.20 0.50	0.80 1 0 0.20 0.80 0.50	
0.20 0 0.80 0.20 0.50 0.10	0.80 1 0 0.20 0.80 0.50 0.90	
0.20 0 0.80 0.20 0.50 0.10 0.70	0.80 1 0 0.20 0.80 0.50 0.90 0.30	
0.20 0 0.80 0.20 0.50 0.10 0.70 0.20	0.80 1 0 0.20 0.80 0.50 0.90 0.30 0.80	
0.20 0 0.80 0.20 0.50 0.10 0.70 0.20 0.90	0.80 1 0 0.20 0.80 0.50 0.90 0.30 0.80 0.10	
0.2000.800.200.500.100.700.200.900.20	0.80 1 0 0.20 0.80 0.50 0.90 0.30 0.80 0.10 0.80	

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Making 1 Whole – Level B

-Fill in each box so the two numbers SUM to a total of 1.00. EXAMPLE: 0.46 \rightarrow 0.46 to 0.50 is 0.04 \rightarrow 0.50 to 1.00 is 0.50 \rightarrow totals 0.04 + 0.50 = 0.54.

1.00	0	0.83	0.75	0.65
0.95	0.05	0.45	0.67	0.75
0.78	0.22	0.30	0.81	0.12
0.32	0.68	0.55	0.25	0.45
0.45		0.25	0.55	1.00
0.25		0.16	0.15	0.95
0.70		0.95	0.85	0.64
0.38		0.35	0.28	0.60
1.00		0.75	0	0.05
0.95		0.47	0.30	0.85
0.58		0.50	0.55	0.19
0.42		0.25	0.75	0.75
0.65		0.69	0.67	0.50
0.88		0.80	0.45	0.25
0.10		0	0.85	0
0.95		0.25	0.15	0.85
0		0.70	0.83	0.22
0.07		0.36	0.50	0.50
0.75		1.00	0.35	0.15
0.60		0.95	0.75	0.78
0.45		0.45	0.20	0.25
0.98		0.50	0.69	0.90
0.80		0.63	0.40	0.26

Making 1 Whole – Level B

Fill in each box so the two numbers SUM to a total of 1.00. *EXAMPLE:* $0.46 \rightarrow 0.46$ to 0.50 is $0.04 \rightarrow 0.50$ to 1.00 is $0.50 \rightarrow \text{totals} 0.04 + 0.50 = 0.54$.

			·					
1.00	0	0.83	0.17	0.75	0.25		0.65	0.35
0.95	0.05	0.45	0.55	0.67	0.33	*	0.75	0.25
0.78	0.22	0.30	0.70	0.81	0.19		0.12	0.88
0.32	0.68	0.55	0.45	0.25	0.75		0.45	0.55
0.45	0.65	0.25	0.75	0.55	0.45		1.00	0
0.25	0.75	0.16	0.84	0.15	0.85		0.95	0.05
0.70	0.30	0.95	0.05	0.85	0.15		0.64	0.36
0.38	0.62	0.35	0.65	0.28	0.72		0.60	0.40
1.00	0	0.75	0.25	0	1 0		0.05	0.95
0.95	0.05	0.47	0.53	0.30	0.70		0.85	0.15
0.58	0.42	0.50	0.50	0.55	0.45		0.19	0.81
0.42	0.58	0.25	0.75	0.75	0.25		0.75	0.25
0.65	0.35	0.69	0.31	0.67	0.33		0.50	0.50
0.88	0.12	0.80	0.20	0.45	0.55		0.25	0.75
0.10	0.90	0	1 0	0.85	0.15		0	1 0
0.95	0.05	0.25	0.75	0.15	0.85		0.85	0.15
0	1.00	0.70	0.30	0.83	0.17		0.22	0.78
0.07	0.93	0.36	0.64	0.50	0.50		0.50	0.50
0.75	0.25	1.00	0	0.35	0.65		0.15	0.85
0.60	0.40	0.95	0.05	0.75	0.25		0.78	0.22
0.45	0.55	0.45	0.55	0.20	0.80		0.25	0.75
0.98	0.02	0.50	0.50	0.69	0.31		0.90	0.10
0.80	0.20	0.63	0.37	0.40	0.60		0.26	0.74

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