

W11961 Code Breakers Game™

Instructions

Equipment:

1 Set of 36 Numbered 5” Spot Markers
1 Set of 26 Lettered 5” Spot Markers
4 Clipboards
Pencils
Instructions

General Description: In this game groups of 2 to 4 teams race to break the code and uncover the hidden words or numbers. A number of variations and suggestions are included in these instructions that can easily be adapted and varied to accommodate different ages and amount of time available to play. The basic concept is that a letter and number spot will be paired together to create a key. One type of spot will be placed on top of the other to hide the one on bottom. Clues are provided to players who race to uncover a letter or number and bring it back to their captain to record and to try to find the hidden code.

Quick Example - 26 numbered spots are selected to placed on top of the 26 letter spots. The pairs of spots would be spread out and randomly placed in the available play area (gym, black top, field or classroom). A team captain provides clues to their team to find a particular number spot, those players then find the appropriate number and peek under the number spot to reveal the letter, and returns to their captain to tell them the letter they found. The captain pieces together the letters to reveal the hidden word, phrase or sentence. Note when players are lifting the numbers to reveal the letter, they should be sure to return the number back to its original position covering a letter.

Hidden Word Game:

Set-Up: Cover the 26 letter spots “L” with the corresponding number “N” as indicated in the Code Breakers Key below. Spread out the pairs of spots randomly in your play area. The spots numbered 27 through 36 can be put to the side or also spread out in the play area to make it more difficult to find the correct numbered spots. Divide your group into 2 to 4 teams and assign them a home base area away from one another. Instructors can assign or teams can choose a captain for the first round. The person being the captain of the team should be rotated for each round. Captains are supplied a clipboard with their number clues written on a piece of paper and a pencil. Only the team captain can see and write on the paper.

Game Play:

Round #1 - At a start signal from their instructor, the team captains give instructions to their teammates to find a number. Those teammates then race to find that number, look underneath the number to reveal the letter underneath, place the number back over the letter and bring the hidden letter back to the captain so that they can record it on their code breaker sheet. When a team thinks they have the answer to their code, their captain raises their arm. At that point, the instructor blows a whistles and all players freeze in their current position. The instructor checks that teams code to see if they have found the correct answer. If they are correct, that team wins. If they are incorrect that team is eliminated from that round, a signal is given for the rest of the teams to continue to find their code and play continues until one team correctly identifies their code or all teams are eliminated. Make sure none of the teams reveals any or all of the code that they have solved after the game or round ends.

Round #2 – Collect all the sheets from round number one. Since the Key will not change for round 2, we don’t want the teams to have a record of what numbers = what letters. Some may remember them, but that is okay. For this round the game is the same, the only change is that the teams will change team numbers and thus the code that they are trying to find. Team #1 will become #2, #2 will become #1 and 3 will switch with 4.

Round #3 – code is the same, just new words. To try to trick the players, the instructor could make them close their eyes or leave the room for a minute or so and make pretend or actually change the spot locations and change what numbers go with what letters.

Round #4 – Collect all the sheets from round #3. Use the same words, just have team 1 switch with 2 and 3 with 4.

Round #5 – Collect all the sheets from round #4. For fun, see if anyone or any team can identify the entire Code Breaker Code based what they remember. It is a pretty simple code!

Options –

1. Require the letters to be found in order. Thus team number #1 would have to find the number 13 to reveal and report back to their captain the letter N, before they could move onto the number 6. All players on the team work together to spread out and find the number they are working on as quickly as possible and report back to their captain.
2. Allow for the captain to assign different numbers to players on their team simultaneously. This will result in faster play, but captains and players must remember and record the appropriate numbers and letters in the correct spot or risk coming up with the wrong answer!

Note: If teams have an unequal number of players, then on the team or teams that have more players a second captain should be assigned to those teams and both captains will need to work together.

Hidden Word Math Code Breakers Game (addition and subtraction)

Description: In this game all the teams will compete to break the same code and find the same answer simultaneously. Clues will be given in the form of math equations. The solution to each equation is used to determine what number spot to find and to use to get the corresponding hidden letter.

Set-Up: Cover the 26 letter spots “L” with the corresponding number “N” as indicated in the Code Breakers Key below. Spread out the pairs of spots randomly in your play area. You can have players compete individually or divide your group into as many teams as desired. Each player or team is provided a math clue sheet to use to solve each of the 4 puzzles. The math used only includes addition and subtraction, so it should be suitable for grades as low as 2 and can be fun for all ages.

Game Play: Each player or team is given the two sheets with the 5 codes to break and a pencil. Prior to the start of play, the instructor should decide if there will be one winner per round, multiple winners (like the top 3 finishers) or if all players must complete the round before players can start the next round. If not all players are required to finish a round on their own, then the instructor should give each player, or team, the answer to that round so that it can be referenced in future rounds. All players work on the same code at the same time and are not allowed to skip to the next section. Anyone caught working on the future round should be disqualified from the next round. Each player’s (or team’s) answer sheet must stay in one place, players are not allowed to carry them around. This will require more movement by the players. Players are allowed to use the previous rounds answers to help them break subsequent rounds codes, but let them figure that out on their own. In the last round, players must complete the entire code breaking sequence. They are again allowed to use the answers from the previous rounds and then must search for the missing letter and number combinations to complete the entire code.

Code Breaker Key and Answers for Math Code Breaker Game: (for Instructor’s eyes only!)

N	7	28	10	1	20	36	31	4	21	25	33	14	35	16	9	3	34	23	15	12	19	5	18	22	26	30
L	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

The following numbers are not used to cover letters. They can be placed in the play area to make the search more challenging 2, 6, 8, 11, 3, 17, 24, 27, 29, and 32.

Answer / Instructor’s Key: (Rounds #1 to #4)

Round #1:

Box #1	Box #2	Box #3	Box #4	Box #5	Box #6	Box #7	Box #8	Box #9	Box #10	Box #11				
15	19	28	12	23	7	10	12	21	9	16				
S	U	B	T	R	A	C	T	I	O	N				

Round #2:

Box #1	Box #2	Box #3	Box #4		Box #5	Box #6	Box #7	Box #8	Box #9	Box #10	Box #11	Box #12		
20	7	15	26		7	1	1	21	12	21	9	16		
E	A	S	Y		A	D	D	I	T	I	O	N		

Round #3:

Box #1		Box #2	Box #3	Box #4	Box #5		Box #6	Box #7	Box #8	Box #9				
21		14	9	5	20		35	7	12	4				
I		L	O	V	E		M	A	T	H				

Round #4:

Box #1	Box #2	Box #3		Box #4	Box #5	Box #6	Box #7		Box #8	Box #9	Box #10	Box #11	Box #12	
12	4	20		14	7	15	12		23	9	19	16	1	
T	H	E		L	A	S	T		R	O	U	N	D	

Box #13	Box #14		Box #15	Box #16	Box #17	Box #18	Box #19	Box #20		Box #21	Box #22	Box #23	Box #24	
21	15		23	20	7	14	14	26		4	7	23	1	
I	S		R	E	A	L	L	Y		H	A	R	D	

Math Code Breakers: Player's Clue and Answer Sheet – Page #1 (print out one copy of page 1 & 2 for each player or team)

Round #1: Use the hints to find the number for each box, then find the letter that goes with each number.

Box #1	Box #2	Box #3	Box #4	Box #5	Box #6	Box #7	Box #8	Box #9	Box #10	Box #11	

Hints:

- Box #1: $200 - 185 =$
- Box #2: $29 - 10 =$
- Box #3: $44 - 16 =$
- Box #4: $51 - 39 =$
- Box #5: $123 - 100 =$
- Box #6: $16 - 9 =$
- Box #7: $1,087 - 1,077 =$
- Box #8: $21 - 9 =$
- Box #9: $37 - 16 =$
- Box #10: $24 - 15 =$
- Box #11: $47 - 31 =$

Round #2:

Box #1	Box #2	Box #3	Box #4		Box #5	Box #6	Box #7	Box #8	Box #9	Box #10	Box #11	Box #12		

Hints:

- Box #1: $17 + 3 =$
- Box #2: $2 + 5 =$
- Box #3: $9 + 6 =$
- Box #4: $17 + 9 =$
- Box #5: $3 + 4 =$
- Box #6: $1 + 0 =$
- Box #7: $1,087 - 1,086 =$
- Box #8: $12 + 9 =$
- Box #9: $8 + 4 =$
- Box #10: $9 + 12 =$
- Box #11: $5 + 4 =$
- Box #12: $13 + 3 =$

Math Code Breakers: Player’s Clue and Answer Sheet – Page #2

Round #3:

Box #1	Box #2	Box #3	Box #4	Box #5	Box #6	Box #7	Box #8	Box #9

Hints:

- Box #1: $17 + 4 - 2 + 2 =$
- Box #2: $14 + 10 + 7 - 7 - 10 =$
- Box #3: $3 + 4 + 7 - 5 =$
- Box #4: $12 - 7 =$
- Box #5: $12 + 22 - 14 =$
- Box #6: $25 + 20 - 10 =$
- Box #7: $107 - 100 =$
- Box #8: $8 + 4 =$
- Box #9: $2 + 2 + 1 - 1 =$

Round #4:

Box #1	Box #2	Box #3	Box #4	Box #5	Box #6	Box #7	Box #8	Box #9	Box #10	Box #11	Box #12

Box #13	Box #14	Box #15	Box #16	Box #17	Box #18	Box #19	Box #20	Box #21	Box #22	Box #23	Box #24

Hints:

Box #1:	$111 - 99 =$	Box #13:	$11 + 11 - 1 =$
Box #2:	$2 + 2 =$	Box #14:	$8 + 7 =$
Box #3:	$11 + 9 =$	Box #15:	$45 - 22 =$
Box #4:	$7 + 7 =$	Box #16:	$11 + 20 + 3 - 14 =$
Box #5:	$14 - 7 =$	Box #17:	$1+2+1+2+1=$
Box #6:	$45 - 20 =$	Box #18:	$12 + 2 =$
Box #7:	$21 - 9 =$	Box #19:	$21 - 7 =$
Box #8:	$23 - 9 + 8 + 1 =$	Box #20:	$36 - 9 - 1 =$
Box #9:	$3 + 3 + 3 =$	Box #21:	$2 + 2 =$
Box #10:	$7 + 7 + 5 =$	Box #22:	$127 - 120 =$
Box #11:	$28 - 14 + 2 =$	Box #23:	$25 - 12 + 10 =$
Box #12:	$1 + 10 - 10 + 9 - 9 =$	Box #24:	$1,999 - 1,998 =$

Round #5: Complete Code (for each letter fill in what code number is used)

N																										
L	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

Math Code Breakers: Player's Clue and Answer Sheet – Page #1 (print out one copy of page 1 & 2 for each player or team)

Round #1: Use the hints to find the number for each box, then find the letter that goes with each number.

Box #1	Box #2	Box #3												

Hints:

Box #1: During what war was the battle of Gettysburg fought?

- 1) Revolutionary War 2) Civil War 3) World War II
 - Use the answer to the question above + 24 for the number portion of the clue to box #1.

Box #2: From which country did the US colonies declare their independence?

- 1) Spain 2) France 3) England
 - Use the answer to the question above + 17 for the number portion of the clue to box #2.

Box #3: Who was the first president of the United States?

- 1) George Washington 2) Booker T. Washington 3) Thomas Jefferson
 - Use the answer to the question above + 2 for the number portion of the clue to box #3.

Round #2:

Box #1	Box #2	Box #3	Box #4	Box #5	Box #6	Box #7								

Hints:

Box #1: Who was the first person to walk on the moon?

- 1) Louie Armstrong 2) Neil Armstrong 3) Lance Armstrong
 - Use the answer to the question above + 22 for the number portion of the clue to box #1.

Box #2: Which country bombed Pearl Harbor and resulted in the US entering World War II?

- 1) Japan 2) Germany 3) Iraq
 - Use the answer to the question above + 26 for the number portion of the clue to box #2.

Box #3: The Tea Party in the year 1773 was a major spark in the American Revolution, what city did it occur in?

- 1) New York 2) Philadelphia 3) Boston
 - Use the answer to the question above + 17 for the number portion of the clue to box #3.

Box #4: During the American Civil War, who was President of the Confederate States of America?

- 1) Robert E. Lee 2) Stonewall Jackson 3) Jefferson Davis
 - Use the answer to the question above + 20 for the number portion of the clue to box #4.

Box #5: The First Transcontinental Railroad was completed in 1869 and connected what two areas?

- 1) The US to Canada 2) Canada to Mexico 3) The East Coast of the US to the West Coast of the US
 - Use the answer to the question above + 5 for the number portion of the clue to box #5.

Box #6: The Declaration of Independence was adopted by the Continental Congress of the Thirteen American Colonies on?

- 1) July 4th, 1492 2) July 7, 1941 3) July 4th, 1776
 - Use the answer to the question above + 14 for the number portion of the clue to box #6.

Box #7: The main US Allies in World War II were?

- 1) Germany, Japan, and Italy 2) Britain, China, France and Russia 3) Japan, Canada, and Mexico
 - Use the answer to the question above - 1 for the number portion of the clue to box #7.

Math Code Breakers: Player's Clue and Answer Sheet – Page #2

Round #3:

Box #1	Box #2	Box #3	Box #4	Box #5	Box #6									

Hints:

Box #1: How many colonies united together to form the United States?

- 1) 13 2) 50 3) 14

- Use the answer to the question above + 8 for the number portion of the clue to box #1.

Box #2: Who was the 16th US President?

- 1) Ulysses S. Grant 2) Abraham Lincoln 3) Andrew Jonson

- Use the answer to the question above + 22 for the number portion of the clue to box #2.

Box #3: How many Senators are there in the US Congress?

- 1) 50 2) 100 3) 150

- Use the answer to the question above + 1 for the number portion of the clue to box #3.

Box #4: Who was the only President to serve more than 8 years in office?

- 1) George Washington 2) Teddy Roosevelt 3) Franklin D. Roosevelt

- Use the answer to the question above + 2 for the number portion of the clue to box #4.

Box #5: Thomas Jefferson negotiated what purchase from France in 1803?

- 1) Alaska Purchase 2) Florida Purchase 3) Louisiana Purchase

- Use the answer to the question above + 18 for the number portion of the clue to box #5.

Box #6: The first shots in the American Revolution were fired at?

- 1) Concord 2) Lexington 3) Bunker Hill

- Use the answer to the question above + 13 for the number portion of the clue to box #6.

Individual Sheets for Math Codes Breakers Game: One per team or player

Round #1:

Answers	Box #1	Box #2	Box #3	Box #4	Box #5	Box #6	Box #7	Box #8	Box #9	Box #10	Box #11	Box #12	Box #13	Box #14
Number														
Letter														

Hints:

Box #	Equation	Box #	Equation
1		8	
2		9	
3		10	
4		11	
5		12	
6		13	
7		14	

Round #2:

Answers	Box #1	Box #2	Box #3	Box #4	Box #5	Box #6	Box #7	Box #8	Box #9	Box #10	Box #11	Box #12	Box #13	Box #14
Number														
Letter														

Hints:

Box #	Equation	Box #	Equation
1		8	
2		9	
3		10	
4		11	
5		12	
6		13	
7		14	

Round #3:

Answers	Box #1	Box #2	Box #3	Box #4	Box #5	Box #6	Box #7	Box #8	Box #9	Box #10	Box #11	Box #12	Box #13	Box #14
Number														
Letter														

Hints:

Box #	Equation	Box #	Equation
1		8	
2		9	
3		10	
4		11	
5		12	
6		13	
7		14	

Lock Breaker:

Additional Equipment Required: A box with a combination lock or multiple combination locks if more than one round is to be played. Enough prizes for each player on the winning team.

Set-Up: Insert enough prizes inside a box with a combination lock on it. The prizes could be a ribbon for each player, a piece of candy, or some other simple and inexpensive prize. Find the spot markers with the numbers on it that correspond to the lock combination. Record the 3 lettered spots that go with the correct combination numbers in the 3 boxes below. In the top row also note how the lock is to be opened based on instructions that come with the combination lock. Using those 3 spots and 23 others, make 26 pairs of spots that have a letter on top of a number. Spread those 26 pairs of spots out over the available area for play. Create clues or riddles that allow the teams to determine the letter that corresponds with each number in the combination. When they solve a riddle they can go look under a lettered spot to find the hidden number. Teams may want to look under many letters, so as not to give away to other teams the solution to a riddle. When they have all the numbers, they raise their hands to indicate they want to try to open the lock. Teams may try their combination 3 times with a particular lock (in case they don't dial the numbers correctly). While trying to open the lock, the other teams should continue to try to find the combination. If the lock does not open after a team has tried 3 times and another team or teams are ready to try, then the first time must wait until other teams that are ready give it their first try.

Key Example:

Spin twice clockwise stop at	Turn counterclockwise past 0, stop at	Turn clockwise to
Z	T	M
25	3	21

Instructor Key:

Instructions			
Letter that corresponds to hidden number			
Combination Number			

Provide each player or team with a series of riddles or questions that help them find the appropriate lettered spot under which to search for the hidden number spot.

Example based on Key Example above.

1st Letter Clue – The first letter of a five letter word for an animal with stripes.

2nd Letter Clue – The first letter of a four letter word use to describe something that cannot be stopped and that always marches on.

3rd Letter Clue - I will come one time in a minute, two times in a moment, but will never come in thousand years. What letter am I?

Player Key: One per team

Instructions			
Letter that corresponds to hidden number			
Combination Number			

1st Letter Clue –

2nd Letter Clue –

3rd Letter Clue –