Escape the Start-Up Game <u>Teacher Instructions</u>

Preparation:

- 1. Decide how many students will be in each group (ideally two to three students per group).
- 2. Print enough copies of the *Student Code Solution Sheet* (p. 2) and sets of the *Entrepreneurship Challenge Cards* (#1 through #5, located on pp. 3-7) so each group receives one of each.

Directions:

- 1. Divide the students into groups. Give each group one *Student Code Solution Sheet*.
- 2. Have the students write their names on the *Student Code Solution Sheet*.
- 3. Read aloud the scenario and instructions from the *Student Code Solution Sheet*.
- 4. Provide each group with *Entrepreneurship Challenge Card #1* and allow them time to solve the code.
- 5. As each group solves the code for *Entrepreneurship Challenge Card #1*, they will write the numbered code on the lines provided on the left side of the *Student Code Solution Sheet*.
- 6. The group will then solve the formula related to the code, obtain a single number, and write it in the circle on the right side of the *Student Code Solution Sheet*.
- 7. The group will then confirm with the teacher (you) that the code and circled number are correct (answer keys are provided). If the code is correct, provide the group with *Entrepreneurship Challenge Card* #2. If not, have them rework #1.
- 8. Continue until the groups complete all five *Entrepreneurship Challenge Cards*.
- 9. The groups will then use the five codes to solve for the final escape word located at the bottom of the *Student Code Solution Sheet*, thus enabling them to "escape" the locked data room. Note: Teacher Answer Keys are on pages 8-13 of this file.

Alternative Options:

- Provide the groups with all five *Entrepreneurship Challenge Cards* at one time, and let them complete the cards in any order (with or without checking answers with you).
- Have students work alone instead of in groups.

Escape the Start-Up Game Student Code Solution Sheet

Name(s): _

Scenario: You are an entrepreneur who recently began a start-up company that sells online cybersecurity products. It is late at night when you enter the company's data room and hear the door lock on the other side. You realize you are trapped and alone! The keypad near the door requires a secret word to escape. Luckily, the following instructions will help you find the secret word.

- 1. Solve each *Entrepreneurship Challenge Card,* checking with your teacher that the code is correct before moving to the next card (if instructed by teacher to do so).
- 2. Write the code on the corresponding lines below, and then solve for the missing circled number on the right.
- 3. Follow the instructions in the bottom box to obtain the secret word that will enable your escape.

Entrepreneurship Challenge #1 Code First digit minus 3 =	\supset				
Entrepreneurship Challenge #2 Code	$\overline{}$				
Last digit plus 9 =					
Entrepreneurship Challenge #3 Code	\bigcirc				
Entrepreneurship Challenge #4 Code Second digit plus last digit =	\supset				
Entrepreneurship Challenge #5 Code First digit plus second digit =	\supset				
Escape Word Write the five circled numbers on the lines.					

Entrepreneurship Challenge Card #1 Logic Puzzle

Five entrepreneurs recently founded five different companies. They began the companies in different years and required different amounts of start-up money. Use the following clues and logical reasoning to determine when each entrepreneur founded his or her company and with which amount of start-up money.

Directions: If a clue or logical reasoning rules out the year the entrepreneur began his or her company or the required start-up money, place an X in that box. If a clue or logical reasoning confirms the combination, place an O in the appropriate box. Hint: there can be only one O in that *section* of rows and columns of the grid (the remaining boxes in that *section* of rows and columns will have an X).

	Cora	Jake	Nathan	Raúl	Zoey	2014	2015	2016	2017	2018
\$22,100										
\$44,300										
\$62,500										
\$79,700										
\$96,500										
2014										
2015										
2016										
2017										

<u>Clues</u>

2018

- 1. Nathan, who required the least amount of start-up money, founded his company before Raúl and Zoey founded their companies.
- 2. The entrepreneur who founded a company in 2015 required \$62,500 in start-up money.
- 3. Cora founded her company before Nathan founded his company.
- 4. Jake founded his company with \$44,300 in start-up money exactly 1 year before Cora founded her company.
- 5. Raúl founded his company after Zoey founded hers, and he required more start-up money than she did.

After solving the logic puzzle, write the digits of the amount of Raúl's required start-up money on the lines below. The digits make up the code for this challenge.

\$ _____ ____ ____

Entrepreneurship Challenge Card #2 <u>Cryptogram</u>

Determine the pattern, and then write the missing letters of the cryptogam code in the boxes.													
	1	2	3	4	5	6	7	8	9	10	11	12	13
	A	E	Ι	0	U	В		D					
	L4	15	16	17	18	19	20	21	22	23	24	25	26
The letters of the first and last names of four well-known entrepreneurs have been replaced with numbers. Use the above cryptogram code to decipher the names of the four entrepreneurs.													
1.	12	2	9	9		6	2	26	4	20			
ĺ]		
2.	19	5	21	11		11	1	16	8	14	2	19	
3.	23	1	14	14	25		1	15	4	20			
4.	21	11	4	15	1	20		2	8	3	20	4	16

Which of these four entrepreneurs is most famous for his or her "bright" idea? Write the first number of this person's first name and last number of this person's last name on the lines below. Use one line for each digit so the numbers together form a four-digit code.

Entrepreneurship Challenge Card #3 Word Scramble

Unscramble the letters in each box to determine an entrepreneurship-related word and write it on the first line. Then write the number that corresponds with the <u>first</u> letter of the unscrambled word on the second line.

Box A
Word: w_4 o_2 e_7 r_1 n_3
Number of first letter of word:
Box B
Word: v_6 i_7 s_4 t_1 e_8 n_2
Number of first letter of word:
Word: $\begin{bmatrix} n_5 \end{bmatrix} \begin{bmatrix} p_1 \end{bmatrix} \begin{bmatrix} o_9 \end{bmatrix} \begin{bmatrix} m_7 \end{bmatrix} \begin{bmatrix} c_8 \end{bmatrix} \begin{bmatrix} a_6 \end{bmatrix} \begin{bmatrix} y_4 \end{bmatrix}$
Number of first letter of word:
Box D
Word: $\begin{bmatrix} t_3 \end{bmatrix} \begin{bmatrix} s_4 \end{bmatrix} \begin{bmatrix} a_7 \end{bmatrix} \begin{bmatrix} r_2 \end{bmatrix} \begin{bmatrix} t_3 \end{bmatrix}$
Number of first letter of word:
List the number of the <u>first</u> letter from each box's unscrambled word in order (from A to D) on the following lines.
Copy this four-digit code to the Student Code Solution Sheet.

Entrepreneurship Challenge Card #4 <u>Matching</u>

Match the number of the examples with the letter of the entrepreneurship concept they represent. Write the number on the blank line to the left of the entrepreneurship concept. Use each number exactly one time.

Entrepre	neurship Conce	ept	Examples							
a) part	s of a business	plan	1) service, ma	inufacturing, re	etail sales					
b) star	t-up funding		2) investors, credit cards, savings, loans, grants							
c) exit	strategies		3) profit, loss,	net worth, cas	h flow, assets, payroll					
d) owr	nership forms		4) rent, inventory, utilities, salaries, insurance							
e) busi	iness sector		5) goals, market analysis, financial plan, summary							
f) finar	ncial accountinរួ	5	6) promotions, social media, salespeople							
g) busi	ness expenses		7) initial public offering, sell it, liquidate and close it							
h) mar	keting		8) sole proprietorship, corporation, partnership							
Use the corresponding letters and numbers above to solve the following five math problems. Write the numerical answer on the line beneath each problem. This will reveal a five-digit code.										
	h – a =	b + c =	f + g =	d – f =	h – e =					

Entrepreneurship Challenge Card #5 Multiple-Choice Questions

Read each of the following questions related to entrepreneurship and then circle the one	
correct answer.	

A. Which is <u>least</u> asso	ociated with entrepreneu	rship?	
1. opportunity	2. business creation	3. guaranteed paycheck	4. investment
D. Which is a degume	ant that docaribas a same	anu's goals and its stratagies	to achieve them?
B. Which is a docume	ent that describes a comp	iany s goals and its strategies	to achieve them?
1. business plan	2. insurance policy	3. balance sheet	4. bank loan
C. Which is the <u>least</u>	likely description of a suc	cessful entrepreneur?	
1. smart risk-taker	2. unmotivated slacker	3. innovator	4. leader
D. Which is a reason	an entrepreneur's busine	ss may fail?	
1. great employees	2. high product demanc	3. poor business decisions	4. good location
E. Which offers finan	icial, technical, or work sp	ace support to new entrepre	neurs?
1. business incubato	r 2. business generator	3. business freezer	4. business oven
List the number of the lines.	e correct answer for each	question in order (from A to I	E) on the following

Copy this five-digit code to the Student Code Solution Sheet.

Escape the Start-Up Game Student Code Solution Sheet

Name(s): Answer Key

Scenario: You are an entrepreneur who recently began a start-up company that sells online cybersecurity products. It is late at night when you enter the company's data room and hear the door lock on the other side. You realize you are trapped and alone! The keypad near the door requires a secret word to escape. Luckily, the following instructions will help you find the secret word.

- 1. Solve each Entrepreneurship Challenge Card, checking with your teacher that the code is correct before moving to the next card (if instructed by teacher to do so).
- 2. Write the code on the corresponding lines below, and then solve for the missing circled number on the right.
- 3. Follow the instructions in the bottom box to obtain the secret word that will enable your escape.

Entrepreneurship Challenge #1 Code						
9 6 5 0 0 First digit minus 3 =						
Entrepreneurship Challenge #2 Code						
Entrepreneurship Challenge #3 Code						
2 7 8 4 Second digit times 3 =						
Entrepreneurship Challenge #4 Code						
<u>1</u> <u>9</u> <u>7</u> <u>5</u> <u>5</u> Second digit plus last digit =						
Entrepreneurship Challenge #5 Code						
3 1 2 3 1 First digit plus second digit =						
Escape Word						
Write the five circled numbers on the lines. <u>6</u> <u>15</u> <u>21</u> <u>14</u> <u>4</u>						
Change each number to a letter based on its position in the alphabet to solve for the escape word (for example, $1 = a$, $2 = b$, $3 = c$, $4 = d$, and so forth).						
<u>f</u> <u>o</u> <u>u</u> <u>n</u> <u>d</u>						
8						

Entrepreneurship Challenge Card #1 Logic Puzzle

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	Cora	Jake	Nathan	Raúl	Zoey	2014	2015	2016	2017	2018
\$22,100	X	X	0	X	X	X	Х	0	X	X
\$44,300	X	0	X	X	X	0	Х	Х	X	Х
\$62,500	0	X	X	X	X	Х	0	Х	X	X
\$79,700	Х	Х	Х	Х	0	Х	Х	Х	0	Х
\$96,500	Х	Х	Х	0	Х	Х	Х	Х	Х	0
2014	Х	0	Х	Х	Х					
2015	0	Х	Х	Х	Х					
2016	Х	Х	0	X	X					

<u>Clues</u>

2017

2018

1. Nathan, who required the least amount of start-up money, founded his company before Raúl and Zoey founded their companies.

0

Х

- 2. The entrepreneur who founded a company in 2015 required \$62,500 in start-up money.
- 3. Cora founded her company before Nathan founded his company.

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- 4. Jake founded his company with \$44,300 in start-up money exactly 1 year before Cora founded her company.
- 5. Raúl founded his company after Zoey founded hers, and he required more start-up money than she did.

After solving the logic puzzle, write the digits of the amount of Raúl's required start-up money on the lines below. The digits make up the code for this challenge.



Entrepreneurship Challenge Card #2 <u>Cryptogram</u>

Determine the pattern, and then write the missing letters of the cryptogam code in the boxes.													
	1	2	3	4	5	6	7	8	9	10	11	12	13
	А	E	I	0	U	В	С	D	F	G	Н	J	K
	14	15	16	17	18	19	20	21	22	23	24	25	26
	L	Μ	Ν	Р	Q	R	S	Т	V	W	X	Y	Z
The letters of the first and last names of four well-known entrepreneurs have been replaced with numbers. Use the above cryptogram code to decipher the names of the four entrepreneurs.													
1.	12	2	9	9		6	2	26	4	20			
	J	Е	F	F		В	Ε	Z	0	S]		
2.	19	5	21	11		11	1	16	8	14	2	19]
	R	U	Т	Н		Н	Α	Ν	D	L	Е	R	
3.	23	1	14	14	25		1	15	4	20]		
	W	Α	L	L	Y		А	М	0	S			
4.	21	11	4	15	1	20	7	2	8	3	20	4	16
	Т	н	0	M	A	S	1	E	D	1	S	0	N
			_ I	I	_ .		,	·	. "				J

Which of these four entrepreneurs is most famous for his or her "bright" idea? Write the first number of this person's first name and last number of this person's last name on the lines below. Use one line for each digit so the numbers together form a four-digit code.



Entrepreneurship Challenge Card #3 Word Scramble

Unscramble the letters in each box to determine an entrepreneurship-related word and write it on the first line. Then write the number that corresponds with the <u>first</u> letter of the unscrambled word on the second line.

Word: <u>Owner</u> $\begin{bmatrix} W_4 \end{bmatrix} \begin{bmatrix} O_2 \end{bmatrix} \begin{bmatrix} e_7 \end{bmatrix} \begin{bmatrix} r_1 \end{bmatrix} \begin{bmatrix} n_3 \end{bmatrix}$
Number of first letter of word:
Word: invest V_6 I_7 S_4 t_1 e_8 n_2
Number of first letter of word:
Word: company $\begin{bmatrix} n_5 \end{bmatrix} \begin{bmatrix} p_1 \end{bmatrix} \begin{bmatrix} o_9 \end{bmatrix} \begin{bmatrix} m_7 \end{bmatrix} \begin{bmatrix} c_8 \end{bmatrix} \begin{bmatrix} a_6 \end{bmatrix} \begin{bmatrix} y_4 \end{bmatrix}$
Number of first letter of word: <u>8</u>
Box D
Word: start $\begin{bmatrix} t_3 \end{bmatrix} \begin{bmatrix} s_4 \end{bmatrix} \begin{bmatrix} a_7 \end{bmatrix} \begin{bmatrix} r_2 \end{bmatrix} \begin{bmatrix} t_3 \end{bmatrix}$
Number of first letter of word:
List the number of the <u>first</u> letter from each box's unscrambled word in order (from A to D) on the following lines.
2 7 8 4
Copy this four-digit code to the Student Code Solution Sheet.

Entrepreneurship Challenge Card #4 <u>Matching</u>

Match the number of the examples with the letter of the entrepreneurship concept they represent. Write the number on the blank line to the left of the entrepreneurship concept. Use each number exactly one time.

Entrepreneurship Concept	Examples							
a) parts of a business plan	1) service, manufacturing, retail sales							
2 b) start-up funding	2) investors, credit cards, savings, loans, grants							
c) exit strategies	3) profit, loss, net worth, cash flow, assets, payroll							
d) ownership forms	4) rent, inventory, utilities, salaries, insurance							
<u>1</u> e) business sector	5) goals, market analysis, financial plan, summary							
<u>3</u> f) financial accounting	6) promotions, social media, salespeople							
g) business expenses	7) initial public offering, sell it, liquidate and close it							
<u>6</u> h) marketing	8) sole proprietorship, corporation, partnership							
Use the corresponding letters and numbers	above to solve the following five math problems.							

Write the numerical answer on the line beneath each problem. This will reveal a five-digit code.

h – a =	b + c =	f + g =	d – f =	h – e =
1	9	7	5	5

Entrepreneurship Challenge Card #5 <u>Multiple-Choice Questions</u>

Read each of the following questions related to entrepreneurship and then circle the one correct answer.					
A. Which is least associated with entrepreneurship?					
1. opportunity	2. business creation	3.guaranteed paycheck	4. investment		
B. Which is a document that describes a company's goals and its strategies to achieve them?					
1. business plan	2. insurance policy	3. balance sheet	4. bank loan		
C. Which is the <u>least</u> likely description of a successful entrepreneur?					
1. smart risk-taker	2. unmotivated slacker	3. innovator	4. leader		
D. Which is a reason 1. great employees	an entrepreneur's busine 2. high product demane	ess may fail?	4. good location		
E. Which offers financial, technical, or work space support to new entrepreneurs? 1. business incubator 2. business generator 3. business freezer 4. business oven					
List the number of the lines.	correct answer for each	question in order (from A to E	i) on the following		
Copy this five-digit code to the Student Code Solution Sheet.					