Complete Instructions for Running a Sustainability-themed Escape Room

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Introduction

On August 16, 2019, the LinkedIn Go Green South Bay Chapter held an event called "Escape from Climate Change: a Go Green puzzle-solving event" which was extremely popular. 136 LinkedIn employees, organized into 32 teams, participated in this event (split up into four different time slots). This document will explain how to organize your own version of this "escape room"-like event, including listing all the puzzles, the solutions, step-by-step instructions, and pitfalls to avoid.

SPOILER ALERT: this document contains the answers to all the puzzles. Do not read it if you wish to play the game!

How to use this document

This document contains many pages of information that you'll need to modify and then print out. If you want to run your own event from scratch, you'll probably want to make a copy of this document for yourself so you can edit it. (Because I expect that a lot of people will want to use this doc, there's too much risk in making it world-editable -- someone could mess it up)

How does this event compare to a real "escape room"?

In a real escape room, a small number of people (usually numbering no more than 10) enter a room and look for clues to solve a series of puzzles. They are not given any instructions on how to solve any puzzle. Usually, the puzzles are either self-evident, or the clues give hints on what to do in order to solve the puzzle. They almost always have a time limit of exactly 1 hour to break out of the room. There is usually a one-way mirror where the "game control" can observe the players. If game control feels that the players are not making fast enough progress, they will give the players some hints to speed them along. There are usually so many clues and puzzles that all players are preoccupied trying to solve the puzzles. Escape rooms have become one of the most popular group activities in major cities.

Challenges

When we thought of this InDay idea, we realized that it could be so popular that far more than 10 people will want to sign up. In that case, how do we enable many more people to play at the same time? In fact, was there a way for us to allow up to 60 people to play at the same time?

Another challenge, which is true of all puzzle-solving events, is that you want to create "Goldilocks" puzzles that are neither too easy nor too difficult, to avoid either boredom or frustration. We knew that some players would be experienced puzzle solvers, while others were complete novices. Our approach was to design a variety of puzzles to appeal to all levels.

With normal escape rooms, the only goal is to have fun. In contrast, the Go Green team wanted to educate people on climate change, pollution, sustainability, what LinkedIn is doing, and what

individuals can do. But we needed to make sure our puzzles weren't boring, preachy, or bogged down in details.

Key Decisions

With those constraints in mind, we made the following choices:

- 1. In order to allow more than one team to be solving puzzles at the same time, we grouped the puzzles into five different "stations", or virtual "rooms". With that arrangement, we could accommodate five different teams at the same time.
- 2. This meant that we needed to rotate teams through all five stations. So, we would give a time limit of 10 minutes per station. This constraint also meant that we needed to make each of the stations approximately the same in difficulty. This meant that we ended up grouping a number of easy puzzles together into one station.
- 3. But because people were rotating, we needed to build in enough time between rotations for us to reset the puzzles. This added an additional 2-3 minutes to each game session.
- 4. All told, when you include the time in the beginning for laying out the rules and telling the background story to set the scene, and the time at the end for giving out prizes, the entire session would take about 90 minutes.
- 5. If you have more than five teams wanting to play at the same time, as we did, we used tables to divide a very large room into two sides, where each side had five stations. This meant that we needed to duplicate every puzzle. Each side would be completely independent. The teams on the left side would only compete with each other, and likewise with the teams on the right side.

Finally, there was the challenge of choosing a winning team for each session. Since we were giving every team the same amount of time at each station, there were only 3 ways to differentiate which teams were ahead:

- 1. How many clues that team received throughout the game
- 2. Whether they solved all the puzzles (they need all the answers to solve the final puzzle)
- 3. How quickly they solved the final puzzle

In practice, it turned out that many teams solved all the puzzles without any clues, so it felt somewhat arbitrary to award the prize to any specific team. So, ideally, one could give a prize to every team that solved the final puzzle and "escaped the room". If you're not limited by your budget, that's what we'd recommend. In fact, I'd recommend giving a prize to every participant, period. Or maybe no prize at all. The point is that the event itself is fun enough without adding additional competition.

Host's Introduction

(Say this before the start of a game to set the ground rules.)

Hi, everyone, welcome to "Escape from Climate Change", a special event created by <your green team>. This event is like an escape room. Show of hands, how many people have done an escape room before? So, this event is not going to be anything as fancy as the professional escape rooms that you might have done before. However, you will be solving puzzles within a time limit.

Here's how it's going to work. There are five puzzle stations. Each of the stations might have one or two puzzles. You all have exactly 10 minutes to finish the puzzles in each station. After 10 minutes, we will say "stop what you're doing and stay at your station". Then we'll go around and reset all the puzzles, and once we're done, we'll tell you that you can switch stations. So this is kind of like "speed dating", except that you're solving puzzles instead of trying to find a romantic partner. You'll all have a team sheet where you write your answers that tells you which station you should go to in which order.

At each station, there will be journal entries that may or may not help you solve that puzzle. Read each one carefully! After you solve the puzzles in any given station, the final answer for that station will be a single digit -- NOT the individual puzzles. You should keep track of each of these digits so that you can use them all for the puzzle at the very end. Repeat: you will need five digits to solve the final puzzle.

Please don't use your phone to help you solve any puzzles. Most of the time it won't help anyways. When you get stuck, game control will be walking around and can provide clues if you need them. However, every time you ask for a clue, we will mark it on your answer sheet. In the end, the team that solved the final puzzle using the fewest clues wins. In the case of a tie, the team that solved the final puzzle most quickly wins. If no one solved the final puzzle, then no one wins a prize. But even if you don't win, don't stress -- just remember you're having fun and learning about how to be more green!! So don't feel embarrassed to ask for a clue!

Some tips: if you have a large team, try to break up into sub-teams to solve other puzzles or other parts of a difficult puzzle. And if you're amazing at solving puzzles, give your teammates a chance! Today is about teamwork and having fun, not winning. And a final tip: I know you're all excited, but try to keep your voice down so you don't give hints to other teams. In particular, don't blurt out the answer -- you'll help other teams win if you do!

So here's the background story.

Melting ice caps in the arctic have revealed a formation that is clearly not naturally made. The advance party, led by Anna Jones, lost contact a week ago. You and your expedition force must work to gain entry into this new discovery and find out what happened to Anna's team before it's too late.

Throughout your journey, you will find excerpts from Anna's journal, showing growing frustration among her team at their lack of progress. The final entry is celebratory by nature, and morale has been restored in the team due to their success in reaching the lower levels of the structure. That was the last communication sent before their disappearance. You will need to overcome the obstacles in these rooms to discover what happened to Anna and her team. Be careful, work as a team, and bring your friends home.

Okay, we're passing out the package to each team which contains your master answer sheet and table for knowing which station you should go to next. Good luck! Is everyone ready? Does anyone have any questions? Okay, timekeeper, please start your clock. Get set? Go!

Instructions at the end of the game

(Say these instructions at the end)

Alright, everyone, so now that you've finished all the stations, we're going to pass out the last puzzle. Note that you'll need the answers to all five stations in order to solve the last puzzle. Please do not start working on this puzzle until we tell you to, and no cheating please! We're going by the honor code. When you figure out the answer, don't blurt it out -- just come up to me and tell me the answer to the question, "What happened to Anna Jones's party?" You all have five minutes to figure it out in order to "Escape from climate change". Remember, the team that used the fewest number of clues wins. In case of a tie, then the first team that comes to us with the answer wins. Are you ready? Go!

The Puzzles

Altogether, we had nine separate puzzles. I will describe each one, the equipment needed, how to solve it, and how to reset it. Later on, in the section called "The Stations", I will list how the puzzles were grouped by station.

Puzzle 1: Glacial Melt

Description:

This puzzle will have a bucket full of water ("Glacial melt"), a clear tube lined with numbers (like a rain gauge) to track sea level rise, and a backpack. The backpack will be from a lost expeditioner and will have 1 lock on a pocket. The players will search the other pockets to find a journal entry (smallest pocket) and 6 water bottles (largest pocket).

Final answer for the puzzle: 7

How to solve this puzzle:

The water bottles will each have a number on the bottom, from 1 to 6. The journal entry they find will spell out "two six one" in blue letters, which tells the players what order to use the bottles. The players will use those bottles to fill up the tube, and note the number the water fills up to. They are also supposed to pour the water out each time, and are given a hint with "Empty Between Measurements" in the text. Once they have those 3 numbers, they will use it to open a standard combination lock on the smallest pocket, which will have

Equipment:

- A rotating dial combination lock (like those used for high school lockers).
- A backpack with 3 compartments (or at least 2), which has zipper heads that can be locked together using the combination lock.
- At least 6 different water bottles of different sizes.

the final single-digit number they need from that room.

- A large (2 inch diameter) transparent tube which is closed (waterproof, won't leak) on one end. ----->
- A sharpie pen.
- Some masking tape to label the bottoms of the different water bottles.
- A large 5 gallon bucket containing 2 gallons of water.
- A large towel to clean up the inevitable mess.



Journal Entry:

(before printing, change the red letters to blue to be less conspicuous. Note that the words "Empty Between Measurements" is intentionally capitalized!)

The first day in the ruins was a success! The number of artifacts we found was simply astounding! Once through the initial entry way, we found a semi collapsed passage leading to what we thought was an Empty room. But after further examination, we found the room was sandwiched Between two alcoves that were just chock full of pristine carvings! The largest one had Measurements of 7 feet across!! Absolutely incredible!

Dr. Stacy Johnson

Setup:

- 1. Once you've purchased a combination lock, you need to choose 3 water bottles whose volumes are "approximately" proportional to the 3 numbers on the combination lock.
- 2. For each water bottle, fill it to the top and then pour it into the tube, then use a Sharpie to mark that point on the tube with a line. Write on that line the corresponding number on the combination lock.
- 3. Note that it doesn't have to be perfect -- no one said that the scale on the tube had to be linear. In fact, you could even just write a bunch of lines at random points on the tube with a bunch of random numbers!
- 4. For example, our combination was 4-30-24, so we used a cup to represent 4, and then a large water bottle and a medium water bottle to represent 30 and 24. We simply drew ellipses between number 5 and number 20 so we didn't have to draw all of those numbers. We put masking tape under the cup and the water bottles, and labeled the cup '2', the large water bottle '6', and the medium water bottle '1'. We then labeled the other water bottles '3', '4,' and '5'.
- 5. Put all the water bottles into a large compartment.
- 6. Put the journal entry into a small compartment in the backpack. This journal entry must be printed precisely as is, after changing the red letters to blue. (The letters spell "two six one", which tells which water bottles to use)
- 7. Put a small sheet of paper with the number 7 written on it into a small compartment which will be locked by the combination lock.

Clues you can give:

If a team is stuck, ask them to read the journal entry very carefully.

How to reset the puzzle:

- Empty the water in the tube back into the bucket.
- Wipe up the table and the water bottles so they don't get the backpack soaked.
- Put the water bottles back into the large compartment.
- Put the journal entry into the small compartment.
- Put the final answer into another small compartment and lock it with the combination lock.

Puzzle 2: Food Emission

Description:

This puzzle is similar to Puzzle #1 in that we're using a backpack with locked compartments. In this case, we are using two separate "multi-letter" locks -- the first one is alphanumeric, and the second one is just 3 digits. The players must unlock one compartment and then the second in order to get the final answer.

Final answer for the puzzle: 9

Journal Entry:

(Note that I have highlighted the letters that will be visible through the holes in green, but when you print out the final version, you should remove all the highlighting.)

Well today was great. Just great. I feel the sarcasm dripping off my pen as I write this. What else can go wrong? First, I dropped my coffee. It was the first hot drink I had since this god forsaken expedition started days without my morning loe, ridiculous. Then we finally make it to the outpost, our last stop before trekking the final days to the ruins. Ha, I can't believe they actually refer to this place as a settlement. They don't even have hot water. So much for this "glamourous" adventure I was promised.

D.V. Goliath

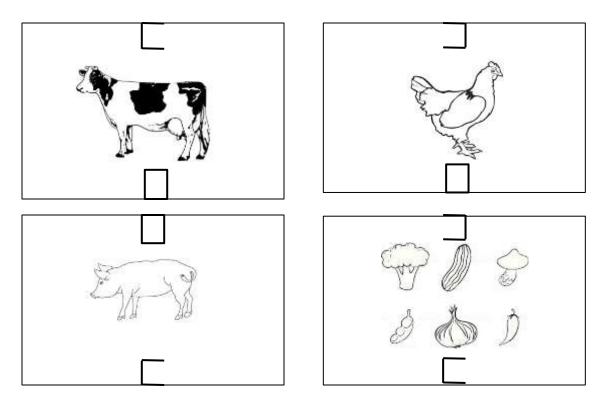
How to solve this puzzle:

The players will find a journal entry which does not seem particularly interesting. They will also find an envelope with some holes cut out on the back. They must put the journal entry into the envelope, with the words facing the holes, and make sure that the lower left corner of the journal entry is flush against the lower left corner of the envelope. The holes will spell out the combination to use to open the alphanumeric lock. In our case, the combination is: !32JO

Once they have used that combination to open one pocket in the backpack, they will receive 4 cards and a chart. The four cards are different types of foods, and the chart lists the carbon costs of various types of foods. When the players arrange the foods by descending order of carbon cost, they will see the cards form 3 digits (859), which are the combination to use to open the last pocket, which will contain the final answer.

Equipment:

- A backpack with 3 compartments which has zipper heads that can be locked together using the 2 different combination locks.
- 2 multi-letter combination locks (like those on a briefcase, but standalone).
- A regular letter envelope.
- A very small sharp knife or small scissors to cut holes in the back of the envelope.
- The following images:



• The following food chart (from http://www.greeneatz.com/foods-carbon-footprint.html):

Food	Pounds of CO ₂ used to grow one pound of food
Lamb	86
Beef	59
Cheese	30
Pork	27
Turkey	24
Chicken	15
Tuna	13
Eggs	11
Potatoes	6.4
Rice	5.9
Vegetables	4.4
Milk	4.2

Setup:

- 1. Change the color for the highlighted letters in the journal entry to be very dark, so they'll be visible through the back of the envelope. Print it out.
- 2. Use a pencil to draw outlines on the envelope where the highlighted letters appear.
- 3. Remove the journal entry from the envelope, and place a piece of cardboard (like from a cereal box) into the envelope.
- 4. Use a sharp knife to cut the holes out. The cardboard will prevent the knife from cutting the other side of the envelope.
- 5. Change the color for the highlighted letters in the journal entry to no highlighting and print out the journal entry.
- 6. Place the journal entry and the envelope into a small compartment in the backpack.
- 7. Place the food images and the chart into another compartment, and lock that compartment using the alphanumeric combination lock.
- 8. Place a small piece of paper with the number 9 into another compartment and lock it with the 3-digit combination lock.

Clues you can give:

Tell the players to check the envelope carefully.

How to reset the puzzle:

Follow steps #6-8 in the Setup.

Puzzle 3: The Pieces Fit

Description:

This is a very simple puzzle -- it's a jigsaw puzzle where, once you put it all together, you will see that certain letters will spell out the words "TWO DEGREES". Each letter is circled in red, and the letters are linked to each other by lines.

Final answer for the puzzle: TWO DEGREES

How to reset the puzzle:

Scramble the pieces. Some teams will be "mean" and even turn all the pieces over. Please discourage this mean-spiritedness, as it does not make it more fun to solve the puzzle, just harder.

Puzzle 4: Fishing Game

Description:

The original idea for this game was to educate people on how much we are polluting our oceans. It was meant to be a fishing game where players use a fishing rod to rescue fish from a "tank" that also contains trash, plastic, and "dead" fish.

Final answers for the puzzle:

5, 1, "sea turtles", "dead zones", 7

How to solve this puzzle:

As you pick up each fish, that fish is labeled with a key which indicates a letter or digit, as well as the coordinates for putting that letter or digit into a table. For example, the key "A,1 = 5" means "write the digit 5 at column A, row 1 of the table."

Equipment:

- A magnetic fishing set.
- Some miniature toy garbage, for example, cans, utensils, ketchup, mustard, hamburgers, etc. -- these are often used for dollhouses.
- Some scotch tape and small pieces of paper.
- A box or bag large enough to contain the fish and the garbage.
- The following table:

		Α	В	С	D	Е	F	G	Н	I	J	K	L	М	N
How many garbage patches are there in the ocean?	1														
How many million seabirds are estimated to die per year from plastic?	2														
74% of the diet of these animals now consists of plastic.	3														
Areas where sewage and agricultural runoff have caused the collapse of ecosystems where marine life cannot survive due to low oxygen (hypoxia) are called:	4														
Since the mass production of plastics began in the 50s, how many billion pounds of plastic waste has been produced?	5														

Setup:

Label all the different fish with the keys that would fill out the table as follows:

		А	В	С	D	Ш	F	G	Н		J	K	 М	N
How many garbage patches are there?	1	5												
How many million seabirds are estimated to die per year from plastic?	2	1												
74% of the diet of this animal now consists of plastic.	3	S	е	а	t	u	r	t	1	е	S			
Areas where sewage and agricultural runoff have caused the collapse of ecosystems where marine life cannot survive due to low oxygen (hypoxia) are called:	4	d	е	а	d	Z	0	n	е	S				
Since the mass production of plastics began in the 50's, how many billion pounds of plastic waste has been produced?	5	7												

Clues you can give:

- Multiple people can participate at a time. Two fishing rods are provided to speed up the fishing. One player can transcribe while two others are fishing.
- If the team is small (3 people or fewer), we recommend that they don't actually use the fishing rods -- they can just grab the fish out of the tank. Otherwise they might not have time to solve all the puzzles.

How to reset the puzzle:

Place all the fish and garbage back into the box.

Puzzle 5: Sorting Waste

Description:

The goal of this game is to teach people how to sort objects into 3 different categories. The objects are labeled with letters. After they've sorted all the objects, they take all the letters and unscramble them to answer the questions in a trivia table.

Final answers for the puzzle:

Styrofoam San Francisco reduce reuse

How to solve this puzzle:

Players sort 17 images into 3 categories: recyclables, compostables, and reusables. After they've sorted all the objects, the letters behind each object will spell out the answer to each of 3 trivia questions. There are 5 recyclables, 6 compostables (all foods), and 6 reusables.

Equipment:

Print out this table:

(Sources: https://sciencing.com/long-styrofoam-break-down-5407877.html, https://grist.org/article/how-american-recycling-is-changing-now-that-china-wont-take-it/)

Sort recyclables for answer	Sort compostables for answer	Sort reusables for answer
This product is estimated to take up to 1 million years to decompose (if ever).	In the United States, what city leads the way in diverting more than 80 percent of its waste — two and a half times more than the national average?	Crippling the recycling industry, in 2018 China banned taking any recyclables unless they meet an extremely strict contamination rate of 0.5 percent. What can we consumers do to ensure that items we used to recycle now don't end up in landfills, burned, or in our oceans?
ANSWERS:		

Print out the following 17 images:



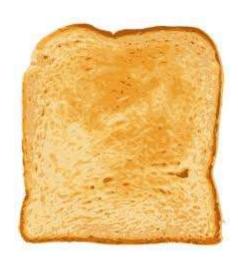


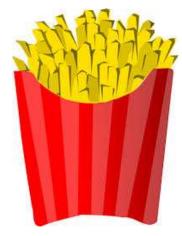
















Setup:

Print out the 17 images. Behind each image, write the following letters:

cans: S T

glass bottles: Y R

plastic water bottles: O F plastic milk jugs: O A

newspapers: M pizza: S A bread: N F french fries: R A

broccoli: N C fish: I S cheese: C O

metal water bottles: R E metal utensils: D U ceramic plates: C E coffee mug: R E

metal camping cup: U S

glass cup: E

Clues you can give:

- Tell players how many objects should be in each category (5 recyclables, 6 compostables (all foods), and 6 reusables).
- Ask them, "what can you do with the letters?"
- Note that it is relatively easy to Google the answers to trivia questions #1 and #2. Make sure players are not using their phones to cheat.

How to reset the puzzle:

Scramble the objects back into one pile.

Puzzle 6: The Path to Sustainability

Description:

This is a twist on the typical trivia quiz. We created a flow diagram with 18 questions. Each question is printed on a bubble, with 2 arrows connecting that bubble to other bubbles. Each of the 2 arrows represents a possible answer. Each bubble also has a letter. The point of the game is for players to follow all the arrows to spell out an 18-letter phrase by answering each trivia question correctly. The twist is that the flow diagram is printed on a cube, so players need to follow the arrows around the cube. This game is meant to be more fun and tactile.



Final answer for the puzzle: 2

How to solve this puzzle:

The players are given an info sheet (NOT PROVIDED -- please come up with your own) which contains all the answers for the 18 trivia questions. Their job is to find all the answers to solve the puzzle. Once they have figured out the right 18-letter phrase, for example, "there's only one earth", the info sheet will ask a question such as "Add one to the only number that is mentioned in the final answer from the cube:

Equipment:

- An info sheet which you must create.
- A roughly square shipping box at least 8" x 8" x 8".
- Some white printer paper.
- A black sharpie marker.
- Some scotch tape.
- A lot of transparent packing tape to completely cover the box.
- Two dry-erase markers.
- A dry-erase eraser.
- 18 trivia questions you must come up with. I've listed some sample questions to get you started. When creating the questions, remember which of the two answers is the correct one so you can draw the right lines to connect one bubble to another! I did this by highlighting the correct answer, but when you print the answers, remember to unhighlight all the answers.

T How much of the world's carbon emissions comes from air travel? 2% 20%	Y It is more sustainable to fly coach class. True False
H What does "CarbonCure" mean? Transforming Injecting carbon into carbon into fertilizer concrete	O How many people in the world don't have enough to eat? about 2 billion about 800 million N
E	E
R	
E	E
S How much food is wasted globally? 1/5 1/3 O	A How much time are Americans indoors? 75% 90% R Which substance is 25 times more powerful as a greenhouse gas than CO_2 ? ozone methane
N	T Which country stopped accepting recycling materials recently? China Mexico
Which one of these is growing at twice the rate of population growth? energy use water use	H Which of these is the largest single component of municipal landfills? diapers food waste

Setup:

- 1. Cover the cubic box with white paper. Tape the white paper together at the edges.
- 2. Tape the 18 trivia questions onto the cube, so that the first question-bubble is on one face and the second question-bubble is on an adjacent face to the first. Using the sharpie, connect the correct answer from the first bubble to any point on the second bubble. (DO NOT number the bubbles -- obviously that would give it away!)
- 3. Do the same to connect the second bubble to the third.
- 4. Distribute the bubbles so that there are 3 per face.
- 5. After you have connected all the bubbles, draw lines from the incorrect answer on each bubble to any other random bubble, preferably on another face.
- 6. After drawing all the different lines, use the clear packing tape to completely cover the cube so that dry-erase markers can draw a path connecting all the bubbles.
- 7. Print out at least three copies of the info sheet so that multiple people can be looking for answers at the same time.

Clues you can give:

- Tell the players that they can distribute/parallelize the task of looking for answers.
- Remind them that the letters for each bubble are very important.

How to reset the puzzle:

Simple -- just erase all the markings with the dry-erase eraser.

Puzzle 7: Juggling Transportation Options

Description:

This is a fairly straightforward logic puzzle which teaches the players a little bit about the transportation options available to them in the Bay Area.

Final answers for the puzzle:

San Jose carpool

How to solve this puzzle:

Players have to use the process of elimination to figure out which option Rajeev must take.

Equipment:

Print out the following information:

Puzzle #7: Juggling Transportation Options

Congratulations! You've just joined the Bay Area Transportation team. Your first assignment is to figure out how to balance the different transportation options for our employees. For the purposes of this puzzle, let's say we only have the following resources for our employees (in reality we have more options): Carpool, Train, Biking, and Bus Shuttle from SF. There are five commuters trying to get to work in a "green" way -- in other words, none of them want to drive to work alone. They are Jon, Susan, Mei, Rajeev, and Sergei. Here are some facts to keep in mind to figure out the answer to this puzzle:

- Mei has never met Sergei or Rajeev.
- Susan bikes to work.
- Only people who live in the same city can carpool.
- Rajeev doesn't own a bike.
- Sergei takes the train.
- Jon lives in San Jose.
- Sergei doesn't live in the same city as Rajeev.
- Of the five people, only two of them carpool with each other.
- Mei lives in San Francisco.

1. Where does Rajeev live?	2. How does he get to work	:?

Clues you can give:

- Tell players that they can make scratch notes on the piece of paper.
- Tell players that it might be easier to solve the second question before solving the first question.

How to reset the puzzle:

Provide a new copy of the puzzle.

Puzzle 8: Word Fun

Description:

This is a straightforward puzzle where you find all the words in a grid.

Final answer for the puzzle: ACTION

How to solve this puzzle:

Once the players have found all the words, they need to realize that the letters where the words intersect are significant. They then unscramble those letters to get ACTION.

Equipment:

Print	out	the	follo	wing	inf	form	ation:
-------	-----	-----	-------	------	-----	------	--------

Puzzle #8: Word Fun!

Find the following words in this word search:

paris climate accord two degrees celsius solar wind clean carbon zero waste

After finding all the words, they'll help you answer the question:

What do we need the most right now in order to address climate change?

MEZEROTZB

SRTSAWECD

UAPSCTDDE

ILAAANNRG

SORMRWIOR

LSINBIWCE

E L S D O B A C E

C L E A N C S A S

Clues you can give:

Ask the players which letters might be special once they have found all the words.

How to reset the puzzle:

Provide a new copy of the puzzle.

Puzzle 9: Crossword Conundrum

Description:

A straightforward crossword puzzle.

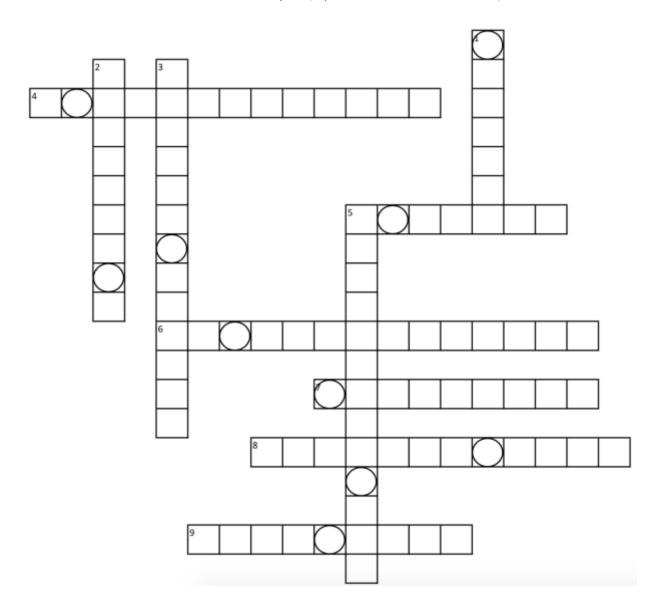
Final answer for the puzzle: SOLAR POWER

Equipment:

Print out the following information:

Puzzle #9: Crossword Conundrum

Use the words: Sustainability CarbonOffsets ClimateChange Conservation Rideshare Pollution GoGreen FoodWaste GreenhouseGas Recycle (Tip: the answer is two words)



Across:

- 4 Long-term alteration of temperature and weather
- 5 The team putting on this event
- 6 A way of life which doesn't deplete natural resources
- 7 A byproduct that is dirty or harmful to nature
- 8 Avoiding wasteful use of a resource
- 9 Food that goes uneaten and is thrown out

Down:

- 1 Convert waste to a usable form
- 2 Uber, Lyft, Sidecar, etc.
- 3 A reduction in CO2 emissions in one place to compensate for CO2 emissions elsewhere
- 5 Molecules which trap heat in the atmosphere

The Stations

As I mentioned previously, some puzzles were fairly difficult while others were easy. In order to make the puzzle-solving more challenging and balanced, we decided to group various puzzles into stations. Here are the groupings:

Station 1: Puzzle 1 Station 2: Puzzle 2

Station 3: Puzzles 3, 4, and 5

Station 4: Puzzle 6

Station 5: Puzzles 7, 8, and 9

For Station 3, since the puzzles yielded many different answers, we created yet another puzzle (a "meta-puzzle") so that we could tie them all together to yield the number 1. The meta-puzzle was as follows, and it spells out "FIVE - FOUR".

For Station 5, we had to do something similar for Puzzles 7, 8, and 9. Once the players connected all the answers together, they drew the number 4.

Station 3 Final Puzzle

E = SAN JOSE

V = SEA TURTLES

T = 4

I = MOUNTAIN VIEW

E = CIGARETTE BUTTS

N = SAN DIEG

F = 5

O = STYROFOAM

T = INCREASE CONSUMPTION

E = KEEP LIGHTS ON

I = 1

U = SAN FRANCISCO

W = SHOOT TRASH INTO SPACE

R = BURN TRASH

G = NEW YORK CITY

E = ALUMINUM CAN

N = SEATTLE

H = 3

F = TWO DEGREES

T = AEROSOLS

R = REDUCE REUSE

E = DEAD ZONES

X = 2

O = MIAMI

* = 6

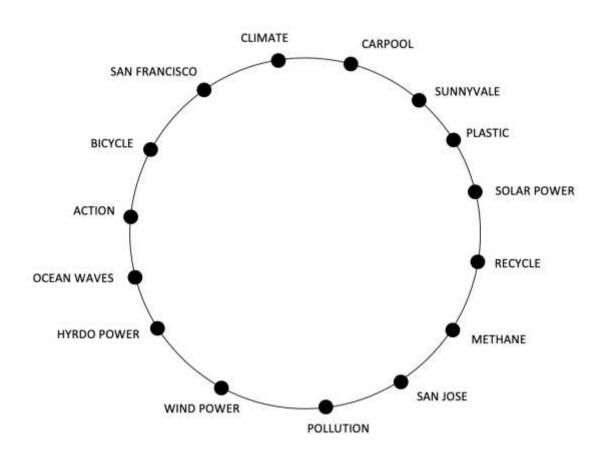
/= PLASTIC

+= CONSERVE

-= 7

Station 5 Final Puzzle

Connect the answers for Puzzles #7-9 in the correct order to reveal this station's final answer



Final Puzzle

So, in summary, the five digits generated by the five stations were 79124. This is the combination for the final puzzle, a lockbox with a five-digit lock. When you open the final puzzle, you will see only this journal entry:

Wow, we've come so far and learned so much! If only we could take all the lessons that we've learned and tell the rest of humanity how to save themselves. It's not too late! We found one final clue that seems to have been left here by a civilization that was here before us (or perhaps a future civilization that sent us a message backwards in time...?!) -- if only we could figure it out, maybe there would be hope!

OOITU

How to solve this puzzle:

If you count where the missing letters are, you'll realize that they are at 1, 2, 4, 7, and 9 -- exactly the same digits as the combination. So, place the letters "O O I T U" into the missing spaces by placing 'O' into position 7, 'O' into position 9, 'I' into position 1, 'T' into position 2, and 'U' into position 4 to get the phrase "ITS UP TO YOU".

Once a team has figured out how to solve this puzzle, they officially "escape the room". The first team to figure out this puzzle wins the game.

Master Checklist for the Escape Room Event

Things to do before the event:

- meet all the volunteers and give them instructions
- make sure everyone is clear about what they need to do
- move one set of tables to the middle of the room to separate the two sides
- set up all the different puzzles, games
- tape the station numbers to the tables
- Go get towels from the gym
- Bring copies of important docs:
 - Host Intro 1 copy
 - Volunteer guide 8
 - Cube puzzle info sheet 6
 - Crossword puzzle 11 per time slot (just in case) = 44
- Bring all supplies:
 - 2 buckets of water ½ full
 - Towels to wipe up any water
 - Dry-erase markers, erasers
 - o 20 pencils, scratch paper, notepads
 - Scotch tape
 - List of all team names, laptop
 - All games and printouts
 - Team sheets
 - o Go Green T-shirts

Things to do before/after every 1-hour game:

- remind everyone to pick up all their belongings and any trash
- Reset all puzzles, put new copies of paper puzzles on the tables
- pass out prizes

Things to do when all participants arrive:

- Introduce this event (see Host's Introduction below)
- Announce rules and restrictions
- pass out answer sheets, pencils, and schedules for timings
- If people have not formed teams yet, ask them to break up into teams of 3-6 people, evenly distributed. Maybe count off 1, 2, 3, 4, 5, 6, 1, 2, ...etc. People can pick their own team names, or they can just be "Team 1, Team 2" etc. or maybe use Hogwarts house names or superheroes or movie stars or whatever.

Things to do between station switches:

Reset all puzzles

- scramble the jigsaw puzzle
- erase all markings from the cube
- dump out all the water into the bucket, clean up the table, dry the water bottles
- provide new copies of paper puzzles
- set up shooting gallery
- put fishing objects back into the bowl
- Backpacks: place the puzzles back into the backpack, put the lock back on, and scramble the combinations

Allow teams to rotate stations

Things to do after the event:

- Clean up
- Celebrate
- Exhale (optional)

Volunteer instructions:

Timers:

- Please set phones to ring at 9 minutes per station. When the alarm goes off, announce "stop what you're doing so we can reset the puzzles." Once all the resetters have finished resetting all the puzzles on both sides of the room, say "you can move to your next station now."
- At the end, pass out the final puzzle and say don't work on it until we say start. The volunteers are paying attention, no cheating or you're disqualified.
- At the end of the game, record which team came to you with the answer first.
- Write the order in which teams came to us in case of ties.
- Hand out prizes.

Game control:

- Walk around and provide clues to anyone who needs them, but mark their sheets.
 Remember, teams are competing on how few clues they needed to use.
- Make sure that people are not eavesdropping on other teams or messing up clues.
- Help people with any logistical issues like puzzles not working.
- After each station finishes, reset all puzzles.
- Tell people about how to open the small black Master locks (how to line up the numbers)

Clues for each station

Station 1: Glacial Melt

- Clue 1: read the journal entry very carefully.
- Clue 2: look for blue letters.
- Clue 3: which words are capitalized and what do they mean?
- Clue 4: you can use the bottles to fill up the tube. You just have to know which bottles.
- Clue 5: the number on the water level is significant

Station 2: Food Emission Clue: put the sheet into the envelope and line it up

Station 3: Tell players how many objects should be in each category (5 recyclables, 6 compostables (all foods), and 6 reusables).

Station 4: Pay attention to the letters.

Station 5: Three puzzles

- Puzzle 1: Transportation: to understand where Rajeev lives, first figure out how he gets to work.
- Puzzle 2: Word Fun clue: ask "Which letters are special?". (2nd clue: where the words intersect)

Answers for each station

Station 1: Glacial Melt - the combo for the lock is either 4-30-24 or 36-2-36.

Station 2: Food Emission Clue: the combo for the 5-alphanumeric lock is !32JO.

Station 3:

- Jigsaw puzzle answer: TWO DEGREES
- Fishing game answers:
 - 0 5
 - 0 1
 - o SEATURTLES
 - o DEADZONES
 - 0 7
- Sorting game answers:
 - o STYROFOAM
 - o SAN FRANCISCO
 - o REDUCE REUSE

Station 4: Answer: THIS FRIDGE IS ON FIRE

Station 5:

• Puzzle 1: SAN JOSE, CARPOOL

• Puzzle 2: ACTION

• Puzzle 3: SOLAR POWER

Answer sheet for Team:	
The first Station you'll work on is (for example, if you're at Station 5, move	After each station, move to the next one round-robin to Station 1).
Station 1: Glacial Melt	
FINAL ANSWER:	
Station 2: Food Emission FINAL ANSWER:	
Station 3: The Pieces Fit	
Answers to fishing game: 1)	
4)	
5)	
Answer to jigsaw puzzle:	
Answer to sorting waste: 1)	
2)	
3)	
FINAL ANSWER:	
Station 4: The Path to Sustainability	
Puzzle answer:	
FINAL ANSWER:	
Station 5: Puzzling Problems	
Answer to Juggling Transportation Option	s:
Answer to Word Fun:	
Answer to Crossword Conundrum:	
FINAL ANSWER:	
ANSWER TO FINAL PUZZLE:	<u> </u>

Number of clues used: