

Answer Key - Contraband Winter Wonderland - December 30th, 2020

A word from our creators:

Some puzzles were tougher than others, but hopefully you were able to enjoy yourselves. Thank you all for playing with us and we hope these Answer Keys will help relieve any questions you had about the puzzles. We'll continue to work on new Online Escape Rooms for you, so stay tuned in to our website at tpl.ca/teens/programs-and-classes.jsp!

Puzzle 1:

Answer: rural air base

The "Language of the Romans" is Latin, which was the primary language of the Roman Empire. Northern lights (shown as a picture of string lights), is called the Aurora Borealis in Latin. Taking "aurora borealis" and taking out the two letter O's, we're left with a collection of letters: "aurra brealis". Once we put these letters into a word unscrambler, three words appear that are also associated with the 3 graphics shown in the puzzle: "**rural air base**".

Puzzle 2:

Answer: taurus

In Greek Mythology, the series of stars that make up the constellation on the tablet screen is named after the bull (hint: the icon on the top-right corner), which is named "**taurus**".

Puzzle 3:

Answer: 32

The number of triangles in the snowflake fractal shape is the key to unlock the elevator. Look for triangles within triangles and count them separately, and don't miss the 2 in the centre of the snowflake either! After a few times counting and recounting, there should be "**32**" triangles in the image.

Puzzle 4:

Answer: breath

The answer to the riddle is "**breath**" because you can see it in the cold as the moisture in your warm breath out condenses into water vapour, and a breath can be held, as well as always go "in and out" while breathing.

Puzzle 5:

Answer: tuesday

The key clue to this puzzle is in the final phrase, “trapped in the land of opposites”. That gives us a hint to try thinking of the opposite word to those bolded on the page. The bolded words are “go”, “off”, “last”, “close”, and “night”. The opposites of these words are “stop”, “on”, “first”, “open”, “day”. String those words together and you get the instruction to “stop on first open day” of the calendar below the page graphic, and that will leave you with “**tuesday**” as the answer since it’s the first day that doesn’t have anything written on it.

Puzzle 6:

Answer: fox

This one is fairly simple, but requires some work to align the wires correctly. The coloured wires match up with the coloured holes - orange with orange, green with green, etc. Once the wires are matched up correctly, the passcode looks like the word “**fox**”.

The fuchsia and yellow holes are decoys!

Puzzle 7:

Answer: small village

Reports from the 4 tunnels:

Agent A is looking at a dead-end and their compass arrow is pointed to their right.

Agent B is looking down their tunnel and their compass arrow is pointed behind them.

Agent C is looking down their tunnel and their compass arrow is pointed to their left.

Agent D is looking down their tunnel, their compass arrow is pointing 315° Clockwise.

You look at a map and find that within the next 5 km of the arctic, there is only:

-A fishing town to the Southeast

-A small village to the East

-A logging camp to the West

-An oil rig to the North

-A remote train station to the Southwest

-A ski resort to the Northwest

Agent A’s tunnel is definitely not the correct option as it’s a dead-end, but that still gives us a clue about which option on the map is NOT the correct location. Agent A’s compass arrow is pointed to their right, which means that North was to their right and that the dead end tunnel is therefore facing West. This tells us that the logging camp to the West is not where the smugglers escaped to.

Agent B’s compass arrow is pointed backwards while they’re looking down the tunnel, so that tunnel must be leading South, and since there’s no South option on the map, this is not the correct tunnel choice either.

Agent C's compass arrow is pointed to their left as they look down the tunnel, which means their tunnel leads East. And we see on the map there is a small village to the East, so this is a possible correct location.

Agent D's compass arrow is pointing 315° Clockwise, which means that North is 45° left of where the tunnel is facing. This translates to the tunnel leading Northwest. Because there's also no Northwest location on the map, then this must mean that Agent C's tunnel leading East to the "**small village**" is the correct location.

Puzzle 8:

Answer: 120

Smugglers have a 20 minute head start and have been going at 30 km/hr. 30 km/hr can be converted to 0.5 km/min by dividing by 60 minutes in an hour. So if the smugglers have been travelling at 0.5 km/min for 20 minutes, that means they have gone 10 km already by the time you're starting your pursuit.

If you take the dog that goes 40 km/hr but rests for 10 minutes every 30 minutes of sledding, that means you're actually going 40 km/120 min. You can also convert this to 0.333 km/min, which is slower than the smugglers, so you surely won't catch them with this option.

If you take the dog that goes 35 km/hr without resting, because you're going consistently 5 km/hr faster than the smugglers, you'll be able to make up the 10 km of distance in 2 hr time, which translates to "**120**" minutes.