

Oh my!

This puzzle, when finished, is 22 feet long and over 6 feet wide.



Luckily, this puzzle is packed in 10 sections where each bag of pieces completes one of the 10 Disney images in the puzzle.



The entire puzzle completed



One of the ten Disney scenes

1. What sorts of questions do you have about this puzzle?
2. How big is each of the 10 sections of this puzzle? Please show how you figured this out.
3. To complete a section, we would need something large and flat to lay the puzzle on. What could we use that would fit one part?
4. The puzzle maker says that it would take one year to complete this puzzle if you worked on it for 2 hours every day. At this rate, how many hours would you estimate that the whole puzzle would take?

5. About how many pieces are in each section of this puzzle?

6. What factors about the puzzle do you think contribute to its difficulty?

We found the data below with approximate completion times for various-sized jigsaw puzzles.

Puzzle number of pieces	Approximate completion time range for one person to complete
300	2 to 3 hours - let's say 2.5 hours
500	4 to 6 hours - let's say 5 hours
1000	12 to 24 hours

With more research we found that a puzzle with twice as many pieces as another puzzle would probably take you 4 times longer to complete.

7. Does that prediction seem to apply to the approximate puzzle timing data that we found above?

Using the above information, try to calculate again how much time the 40,320 piece Disney puzzle might take to complete.

8.	1,000	12 to 24 hours - let's say on average, ___ hours
	2,000	
	4,000	
	8,000	
	⋮	
	40,320	

9. What factors do you think might contribute to this theory that a puzzle with twice as many pieces will take four times longer to complete?

The size of each puzzle piece matters since less of the image will be shown on a smaller puzzle piece. One manufacturer has these size pieces for n-piece puzzles:

- 720 and 1,008 Piece Photo Puzzles: approximately .70 in. X .70 in.
- 252 and 513 Piece Photo Puzzles: approximately .80 in. X .80 in.
- 300 Piece Photo Puzzles: approximately 1 in. X 1 in.
- 204 Piece Photo Puzzles: approximately 1.25 in. X 1.25 in.
- 12 and 99 Piece Photo Puzzles: approximately 1.5 in. X 1.5 in.
- 15, 30, and 48 Piece Photo Puzzles: approximately 3.5 in. X 3.5 in.

10. The Ravensburger Disney puzzle has 40,320 pieces and covers approximately 20 feet by 6 feet when completed. About how big is each jig-saw-puzzle piece?

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Sources: <https://www.puzzlewarehouse.com/how-long-does-it-take-to-put-together-a-500-piece-puzzle/>
<https://www.cbc.ca/kids/cbc2/the-feed/everything-you-wanted-to-know-about-jigsaw-puzzles-to-celebrate-puzzle-day>
<https://www.jigthings.com/choosing-jigsaw-puzzles/>
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