DIGITAL SCHOOLHOUSE

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Jazzy Jigsaws

Featuring Rayman Legends

Ever wondered how puzzle sets consisting of thousands of pieces are ever solved? All those pieces, mixed together, take them out of the box and what's the first thing you do?

Most people will make some attempt to begin to sort the pieces and assign some sort of order to the jumble that came tumbling out of the box. Jigsaw puzzles are well known to help develop strategic thinking and logical reasoning. What's less well known is that they also help develop computational thinking in a really fun way.

This simple classroom activity is one that can last for 5 minutes or 50 and is suitable for all age groups.

NB: Download "Jazzy Jigsaws Teaching Guidance" for a more detailed activity plan

Computational Thinking & Jigsaw Puzzles

Algorithmic thinking – people who solve jigsaw puzzles regularly may often devise their own strategies for solving puzzles quickly. For example, consider the strategy (algorithm) below:

1. Find the edge and corner pieces
2. Place the corner pieces
3. Join the corners by placing the edge pieces (to create a frame)
4. Find pieces with a similar pattern and/or colour and group together
5. Place and fit similar pieces together
6. Arrange groups of puzzle pieces within the frame
7. Complete the puzzle by adding in the missing pieces

Decomposition – taking a large image and breaking it down. Or solving the entire puzzle by resolving smaller groups of it first. Chunking up a problem into smaller more manageable chunks is an effective way to solve a problem. We often find that we do this in Jigsaw puzzles, by solving smaller parts of the puzzle first and then collectively putting them together to form the whole.

Abstraction – the completed puzzle forms an image, a model/representation of something and can hide the complexity of all the separate pieces required to fit together to complete it.

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Generalisation – If we arrive at one strategy to solve a single puzzle quickly and effectively, will the same strategy work for other jigsaw puzzles or will we need to make adjustments to our algorithm to accommodate multiple puzzle sets?

Evaluation – testing out our strategies for solving puzzles and improving them along the way.

How to use this puzzle

1. Print pages 2 and 3 of this document double sided onto card
2. Laminate the card to increase its durability
3. Cut out the individual pieces
4. Play!

Alternatively, upload the image file to: http://www.dailyjigsawpuzzles.net/puzzle-maker.html to work with a digital version of the puzzle.

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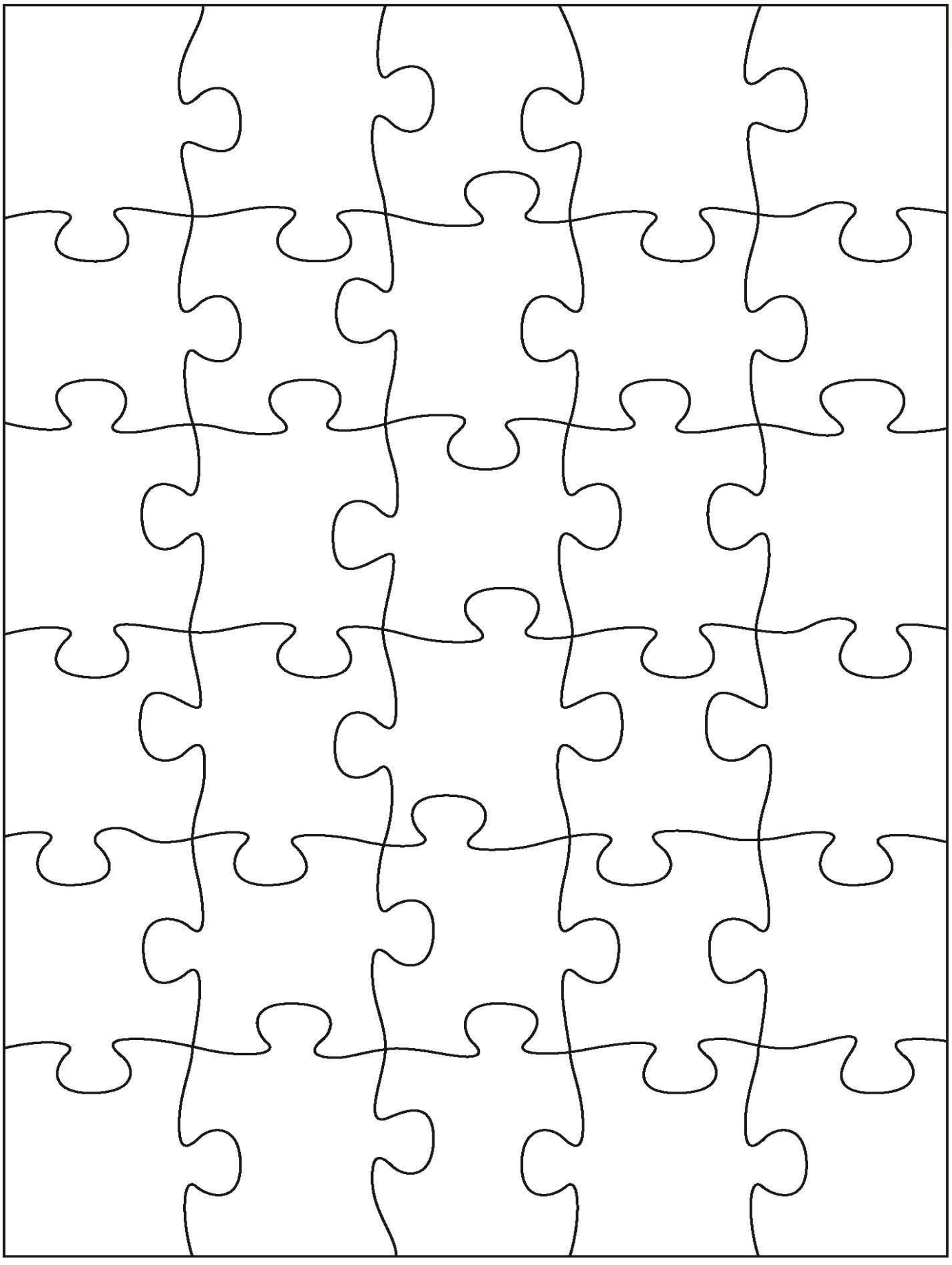

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