

# Model-Making Mindset

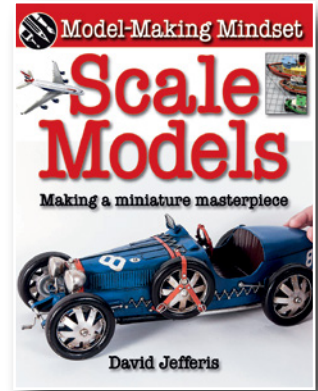
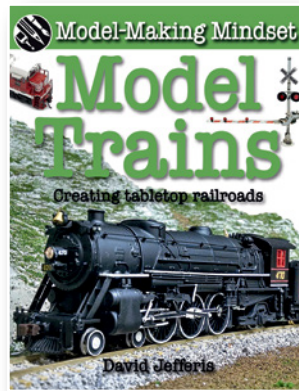


Model makers are creative problem-solvers, who build their proficiency over time to more advanced model building. High-interest topics with photos of real models combine with expert tips on cementing, painting, sanding, scoring, and shaping materials. Clear instructions emphasize building fine-motor skills, patience, concentration, and perseverance. A special section shares the fun of clubs and identifies potential careers that require these kinds of skills.

## Specifications:

Reading Level: Grade 5  
Interest Level: Grades 4-8  
32 pages, 8½ x 11", full color

**\$20.70 RLB**  
**\$8.95 PAP**



## Flying Models: From Soaring Flight to Real Rockets

by David Jefferis

Models that fly need to be more than just good-looking. They need to be shaped just right to move through the air. This engaging introduction to model making explains aerodynamics, the mathematics of scale, how gliders and models propelled by rubber band, electric motor, fuel, or a rocket work, and the difference between building from a kit and building from scratch. Tips on shaping wings, choosing body materials, and weather-proofing help build fine-motor skills. Young readers are encouraged to build patience, concentration, perseverance, and problem-solving.

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## Miniature Figures: From Model Soldiers to Fantasy Gaming

by David Jefferis

Historically, model figures tended to be military ones, such as soldiers. Today, gaming has brought a new popularity to building favorite characters from fantasy games, both people and animals. This exciting introduction to model making explains the mathematics of scale, using the Internet for research, and how to shape and fix molded figures. Tips on painting, filing, smoothing, and applying gloss help build fine-motor skills. Young readers are encouraged to build patience, concentration, perseverance, and problem-solving.

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## Model Trains: Creating Tabletop Railroads

by David Jefferis

Model trains are about more than building each car. It is also about building realistic surroundings for the train to travel through. This compelling introduction to model making explains the mathematics of scale, how clockwork, electric, and steam trains work, and the difference between building from a kit and building from scratch. Tips on painting, cutting and filing, cementing, and basic electronics help build fine-motor skills. Young readers are encouraged to build patience, concentration, perseverance, and problem-solving.

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## Scale Models: Making a Miniature Masterpiece

by David Jefferis

Scale models are usually built as accurate miniatures of real objects such as vehicles, buildings, and even people. This awesome introduction to model making explains the mathematics of scale, and the difference between building from a kit and building from scratch. Tips on painting, scoring, cementing, and weathering help build fine-motor skills. Young readers are encouraged to build patience, concentration, perseverance, and problem-solving.

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- Supports Common Core State Standards for Reading Informational Text Grade 4, Key Ideas and Details RI.4.3, Craft and Structure RI.4.4, Range of Reading and Level of Text Complexity RI.4.10

- Content-specific photographs and tips help support learning, and hands-on activities extend skills and concepts

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## From Miniature Figures: From Model Soldiers to Fantasy Gaming

### What is a scale model?



The moat's "water" is made of resin, a clear liquid that sets hard as it dries.

Scale models are usually built as accurate miniatures of real objects. Scale models are used for many reasons, including those in professional fields, such as architecture, design, and theatrical set design.

The base for the model is made of chipboard, available from woodwork supply stores.

This miniature castle and moat was created by a team of historians and model



This model was made by mixing various parts, including ready-made wheels and electric motor, with a hand-crafted figure.



A model of a Ferrari F40 supercar, seen here in three popular scales. From the top, 1:18 scale, 1:24, and 1:43.

### Why build models?

First of all, it's a fun hobby, and one that is very satisfying when you finish off a top-class model. Also, you need to persevere while taking on the challenge of learning new skills. Such a skill might be something simple like controlling the flow of liquid cement from a tube instead of squirting it everywhere. Other skills, such as learning to use an airbrush accurately, need time and patience.



This 1:72 scale naval ship has extra detail added. The gold-colored components are made of brass.

So what does the word "scale" mean? It describes the amount by which a model is smaller than the real thing. For example, a 1:18 scale model car is 18 times smaller than the actual vehicle it represents. A 1:43 scale car is 43 times smaller, and so on.

Sci-fi and fantasy figures from Hollywood movies

