

Experiment cards

Please use A4 duplex/double sided printing, one copy of each page (total = 2 x A4 sheets).
Please use the trim guides supplied

Experiment

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Experiment

Success



Success



Success



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Success



Experiment

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**Amazing
Success**



**Amazing
Success**



**Amazing
Success**



**Amazing
Success**



Failure



Failure



Failure



Failure



Failure



Failure



Failure



Failure



Project cards

Please use A4 duplex/double sided printing, one copy of each page (total = 2 x A4 sheets).
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Design a
new catalyst



Develop better
fuels for cars



Investigate
better
solar panels



Design a
new
battery



Investigate
corrosion



Improving
computers using
new types of
magnets



Discover a new
way to deliver
drugs



Investigate
materials that
copy nature



Investigate
historical
farming



Study extinct
animals



Investigate
preservation
methods



Create better
electronics



Investigate
pollution



Understand
how insects
fly



Observe
shape of
plant roots



Design a
new
vaccine



Design a new battery



★ ★

Investigate better solar panels



★ ★ ★

Develop better fuels for cars



★ ★ ★

Design a new catalyst



★ ★

Investigate materials that copy nature



★ ★ ★

Discover a new way to deliver drugs



★ ★ ★

Improving computers using new types of magnets



★ ★

Investigate corrosion



★ ★ ★

Create better electronics



★ ★ ★

Investigate preservation methods



★ ★

Study extinct animals



★ ★ ★

Investigate historical farming



★ ★ ★

Design a new vaccine



★ ★

Observe shape of plant roots



★ ★ ★

Understand how insects fly





★ ★ ★

Investigate pollution







★ ★

<p>Learn how life could exist on other planets</p> 	<p>Observe reactions inside a volcano</p> 
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<p>Palaeontologist</p> 	<p>Biologist</p> 	<p>Chemist</p> 
 <p>Palaeontologist</p>	 <p>Biologist</p>	 <p>Chemist</p>
<p>Physicist</p> 	<p>Geologist</p> 	<p>Engineer</p> 
 <p>Physicist</p>	 <p>Geologist</p>	 <p>Engineer</p>



<p>Observe reactions inside a volcano</p>   <p>★ ★ ★</p>	<p>Learn how life could exist on other planets</p>   <p>★ ★ ★</p>
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How to play

The youngest player starts the game. Players then take turns clockwise. On your turn, do the following two things in order:

1. **Move your Scientist**
2. **Perform an experiment**

1. Move your Scientist

On your first turn, place your Scientist on any unoccupied beamline space. On all later turns, you must move your Scientist clockwise 1, 2, 3 or 4 spaces around Diamond to a new beamline space. You can't stay in your current beamline space, and you can't move to a space occupied by another Scientist.

2. Perform an experiment

Draw the top 3 Experiment cards from the deck and reveal them.

Take 1 Success token for each Success icon you reveal. Place them onto Science icons on your Project cards that match your current beamline space. If you don't have any more matching Science icons on your Project cards, skip this step.

Put your Experiment cards on a discard pile. If the deck is used up, shuffle the discard pile to make a new deck.

End of the game

The first player to cover all of the Science icons on their Project cards wins the game, today they are the champion scientist, congratulations!



diamond

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4

**YOUNG
SCIENTIST
VERSION**



diamond

THE GAME

Print & Play Rules

2-5 PLAYERS • 20-30 MIN • AGES 5+

Created by:

Mark Basham, Claire Murray & Matthew Dunstan
www.diamond.ac.uk/Public/DiamondTheGame

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Introduction

Diamond Light Source is one of the largest scientific research laboratories in the UK. Every year thousands of scientists come to do scientific experiments in many different areas including making medicines, studying space dust and protecting our planet.

Inside Diamond's doughnut shaped building is a large machine called a synchrotron, which makes really bright light, including X-rays, that go into a series of laboratories around the ring called beamlines. Each beamline is setup differently to study a different area of science. In the game you will become a scientist, trying to complete scientific projects. To complete a project you will have to visit Diamond's beamlines to do experiments, but be careful to visit the right beamline for the experiments needed for your project. The first scientist to complete three projects will win the game.

Good luck, and let's hope your experiments are successful!

Components



Getting ready

- 1 Lay the board in the middle of the play area.
- 2 Put the Success tokens in the middle of the board as a common supply.
- 3 Give each player a Scientist piece.
- 4 Give each player the 3 Project cards that match their Scientist. Put your Project cards face-up in front of you. Put all the unused Scientist pieces and Project cards away.
- 5 Shuffle the Experiment cards and place them in a face-down deck



Aim of the game

Use the Diamond facility to perform experiments in the six different fields of science that will help you complete your scientific projects. The first player to complete all their projects wins.

