

# Information for patients and carers

## Home exercises: Stereograms

Treatment of convergence insufficiency

A decorative graphic at the bottom of the page consisting of three overlapping, wavy bands of blue color. The top band is a light blue, the middle is a medium blue, and the bottom is a dark blue.

## What is the aim of this exercise?

The aim of this home exercise is to be able to join two different images on a card into one complete image, easily without extra effort.

## What are stereograms?

Stereograms are 3D images hidden within another image. It is a type of exercise used to exercise your eye muscles and the control of your eyes and help to improve symptoms of convergence insufficiency. Dependent on the level of your convergence insufficiency, the orthoptist may advise to start with the 'cat' stereogram first. Once you have been able to do this exercise, they may then advise you to move onto the more difficult stereograms: the 'bucket', then 'ABC' or '123' stereograms.

## How do I perform this exercise?

Please note that these are only basic instructions for this exercise and adjustments may be made by the orthoptist based on your individual need. The orthoptist will demonstrate how to perform this exercise and advise you how often and how long the exercise should be performed during your appointment. The orthoptist will also discuss the importance of relaxing your eyes after exercising (please see the 'Home exercises: Relaxation' leaflet for more information).

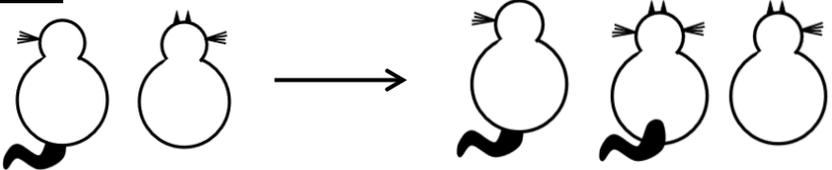
**Note:** For the purposes of these instructions, a pen is described with a 'cat' stereogram. The instructions are the same whether a pen or stick/other target is used as well as whether another type of stereogram is used.

## Instructions

It is probably best to get somebody to read these instructions to you as you do the exercise:

1. Keeping your head held straight, hold the card approximately 30-40cm in front of you at eye level.
2. Place a pen against the centre of the card with the tip of the pen in the centre of the card. Focus on the tip of the pen and make sure you see it as single.
3. Slowly bring the pen towards your nose and keep focusing on the tip of the pen.
  - Try to keep the pen single and the card at the same 30-40cms distance
  - Be aware of the cats but do not look directly at them. At first you should notice that whilst moving the pen towards you, each of the cats on the card appear to become double
4. When the pen is moved to a position roughly half-way between the stereogram and your nose, you should find that whilst holding your focus on the pen, the two original cats now appear as three – the third cat being in the centre of the card (please see image 1).
5. If you can manage to see this, then hold the pen in this position. Try to maintain this third effect for a few seconds.
6. Remember to RELAX your eyes after the exercise (please see the 'Home exercises: Relaxation' leaflet for more information).

**Image 1:**



## Voluntary convergence

With practice, it should be possible to achieve the same effect without even using a pen:

- First, by slowly removing the pen from view and maintaining your focus on the same point in space or:
- By not using the pen at all, but just imagining a point in mid-air between you and the card, and then focusing on this imaginary point

**Note:** most people find this exercise quite difficult at first and sometimes do not see the third cat in the centre of the card. This is usually because they forget to keep focusing on the pen and instead look back at the card. It is very important to keep focusing on the tip of the pen as you move it closer to your nose, otherwise the central cat on the card will not appear.

## Key points to remember:

As with any form of new exercise, your eyes may feel more tired or uncomfortable and you may get a headache when you first begin exercising. This is because you are using muscles that are not used to working as hard as they should be. This is normal and it will get easier as the muscles get stronger.

**It is important that you attend your Orthoptic appointments as advised by the orthoptist to monitor whether the exercises are helping to improve your condition and adjust the exercises given as needed. If you are unable to attend an appointment, please call our appointments team on telephone number: 01772 524010.**

## Contact details

Should you require further advice or information please contact the Orthoptic team on telephone number: **01772 522417** (Monday to Friday between 8.30am to 4.40pm). If the Orthoptists are not available when you call, there is a 24-hour answerphone where you may leave a message.

Orthoptic Department:  
Broughton Suite (near the main entrance),  
Royal Preston Hospital,  
Sharoe Green Lane,  
Preston.  
PR2 9HT

## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)  
[www.nhs.uk](http://www.nhs.uk)  
[www.accessable.co.uk](http://www.accessable.co.uk)  
[www.patient.co.uk](http://www.patient.co.uk)  
[www.squintclinic.com](http://www.squintclinic.com)  
[www.orthoptics.org.uk/patients-and-public/](http://www.orthoptics.org.uk/patients-and-public/)

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**Please ask a member of staff if you would like help in understanding this information.  
This information can be made available in large print, audio, Braille and in other languages.**

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**Division:** Surgery  
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