

Describing Block Patterns

This activity makes you look at things in detail so you can tell someone else what you see.

The blocks you need for this activity are the same ones you used for the last two block activities.

Step 1. Tell your helper how to make a block pattern

Sit at a table or desk with your helper sitting opposite you. Place an opaque barrier upright between you and your helper.

Make a pattern of blocks

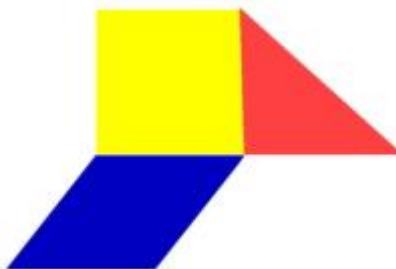
Make a pattern using the three parquetry blocks, square, triangle & diamond. Make your pattern behind the barrier, so that your helper can't see the pattern you have made. Don't make your pattern too complicated, or it will be too difficult to describe. Initially keep your blocks touching along the whole length of each side, i.e. **don't stagger the sides**, so the blocks touch along their entire length.

Describe your pattern

You now have to **tell** your helper how to make your pattern.

Give step by step instructions, using only **words**, no pointing or gestures are allowed.

Your helper makes a pattern on a clear plastic sheet from your instructions. Give detailed instructions so your helper can make an exact match of your pattern **as you see it**. Because your helper is sitting opposite you this means that when they make their pattern from your instructions they should be able to pick it up, hold the plastic sheet against themselves, walk around to your side of the table and their pattern will then match yours exactly.



For this pattern you might say, the square is straight so its bottom side goes the same way as the edge of the table, the diamond is touching the bottom edge of the square along the entire side, so that it points to the left, one of short sides of the triangle touches the right side of the square along its entire length, so that the long side is at the top. This describes how you see the above pattern.

Your helper follows your instructions

Your helper must follow your instructions as carefully as possible. They cannot ask any questions if your instructions are incomplete, or could be interpreted in more than one way. The only thing your helper can say is "I need more information", when they are not sure what you mean.

Check

Keep looking over the barrier to check how your helper is making the pattern. Remember that you are sitting opposite your helper and what is on their right is on your left and what is top to you is bottom to them. Your helper can't look at your pattern though! You may need to change your instructions several times before your helper understands what you mean.

Keep giving your instructions until your helper makes their pattern as you see it.

With practice you will become more precise with your instructions and you will not need to give as many instructions.

Your goal is be able to exactly describe your pattern to your helper with the minimum of instructions.

Step 2. No looking!

After some practice, when you become better at communicating your instructions more easily and precisely, you are not allowed to view your helper's pattern until you have given all your instructions to make the complete pattern. Then you can check whether the patterns are the same or not.

Step 3. Your helper tells you how to make a block pattern

Now change roles so that you listen and follow your helper's instructions to make the block pattern.

Step 4. Tell your helper how to make the block pattern as they would see it

Make another pattern. Give detailed instructions so your helper can make an exact match of your pattern. Because your helper is sitting opposite, you have to describe the pattern in front of you **as they would see it**. This means that when they make their pattern from your instructions it will look exactly the same as yours.

For the above pattern you might say, the square is straight so its bottom side goes the same way as the edge of the table, the diamond is touching the top edge of the square along the entire side, so that it points to the right, one of short sides of the triangle touches the left side of the square along its entire length, so that the long side is at the bottom. This describes how someone sitting opposite you would see the above pattern.

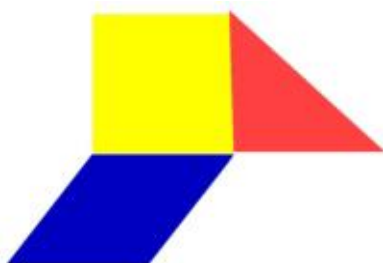
Step 5. 'yes' and 'no' questions

Again sit at a table or desk with your helper opposite you. Keep the opaque barrier upright between you and your helper.

Your helper makes a pattern of blocks

Your helper again makes a pattern using the three parquetry blocks, square, triangle & diamond. They should make their pattern behind the barrier, so that you can't see the pattern. Start with a basic pattern, not too complicated.

Two examples are shown here:



eg 1. blocks touching



eg 2. blocks in a row

Yes and No questions

Now you have to obtain information so you can make an exact match of your helper's pattern, as your helper sees it.

You can only ask questions that can be answered '**yes**' or '**no**'. If you ask questions that cannot be answered 'yes' or 'no', your assistant cannot respond. You will have to ask **a lot of questions** until you think you have a match - this includes colour, spacing, orientation and position.

Examples of questions could be:

1. Is your square straight, not tilted?
2. Is your triangle on top of the square?
3. Is your triangle facing so that the long side is on the right?
4. Is your diamond touching the square? ...etc...etc.

Check

When you think you have an exact match, remove the barrier and look at your helper's pattern.

If it is not the same, try to think what questions you could have asked to make an exact match.

More complicated patterns

When you become better at asking the right questions to match the patterns, your helper should make more complicated patterns. Examples are unequal spacing between blocks, blocks on top of one another, some blocks flat on the table, some upright, etc.

Step 6. Change roles

Now you make a pattern of blocks and your helper asks you the questions as they try to determine how to make your pattern. You can only answer 'yes' or 'no' to any of their questions.