















**WORK IT
OUT****Sequences
"The rugs"****19-11
Level 1
Exercise 1**

<i>Aims</i>	<ul style="list-style-type: none">- Practising comparing data.- Practising harmonising two proportional factors- Learning about sequences.
<i>Applications (examples)</i>	<p><u>In class:</u> any activity involving comparing data to harmonise two proportional factors.</p> <p><u>At work:</u> any job involving indirect relationships, for example in the building trade where proportions are important to mixtures.</p> <p><u>In everyday life and leisure:</u> any activity involving relating different types of data to one another: size, weight, volume (for example while cooking or doing some DIY).</p>
<i>Materials</i>	<ul style="list-style-type: none">- A sheet of paper with symbols representing data: strands of wool and rugs in different thickness.- A table with some blank cells.
<i>Instructions</i>	Taking into consideration the data given, the learners have to draw in the blank cell and enter either the thickness of the rug or a number of wool strands as appropriate.
<i>Comments</i>	The teacher should encourage the learners to discuss the data so that everyone understands clearly what the symbols mean.
<i>Variations (examples)</i>	<ol style="list-style-type: none">1. The exercise could be based on different data, for example the number of pages and the thickness of a book, or the weight of the flour and the volume of a cake.2. The teacher could ask the learners about their leisure activities involving making something out of one or several different materials and get them to explain how they would change the size of the object.
<i>Individualisation</i>	Yes.
<i>Answers</i>	Yes.

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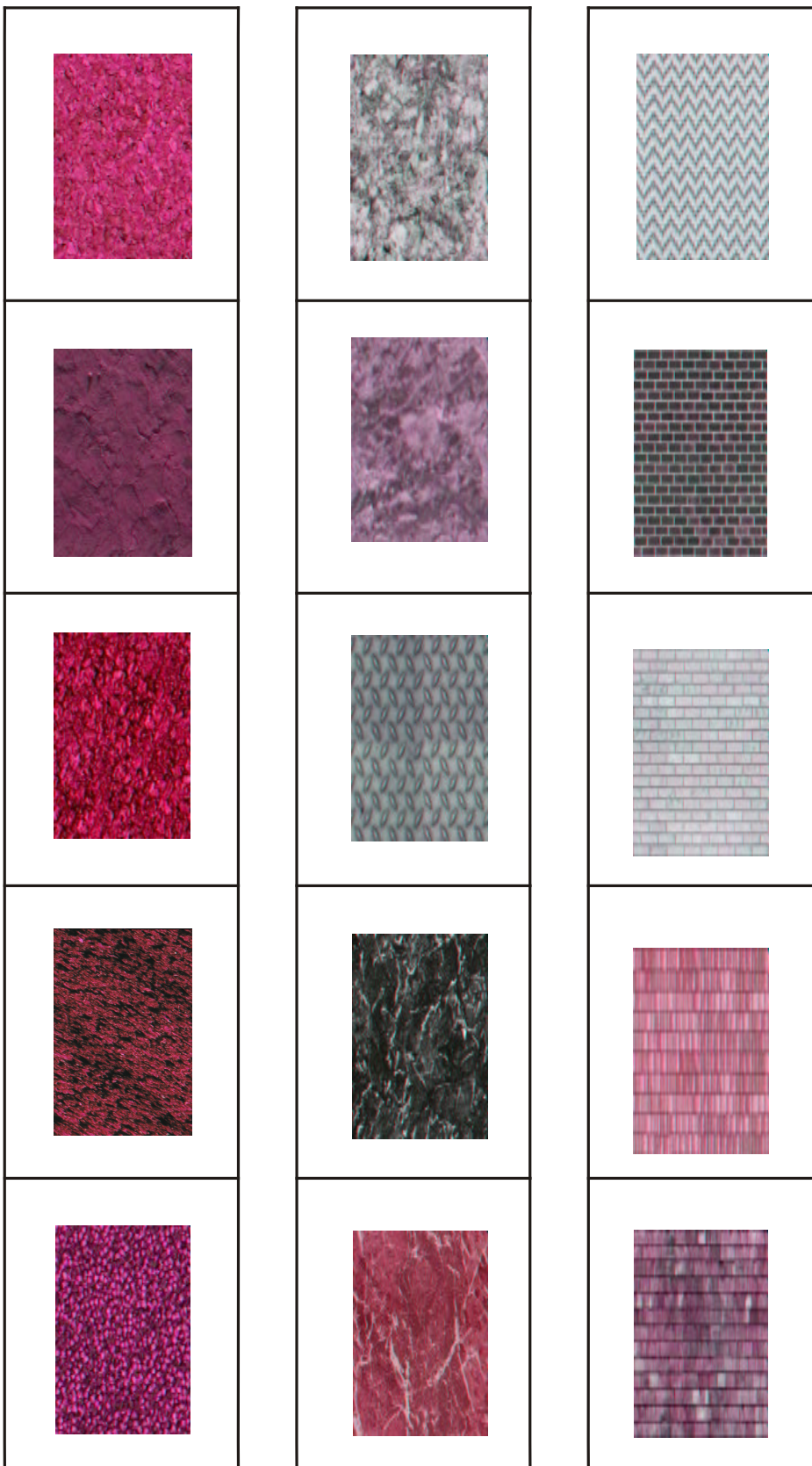
	
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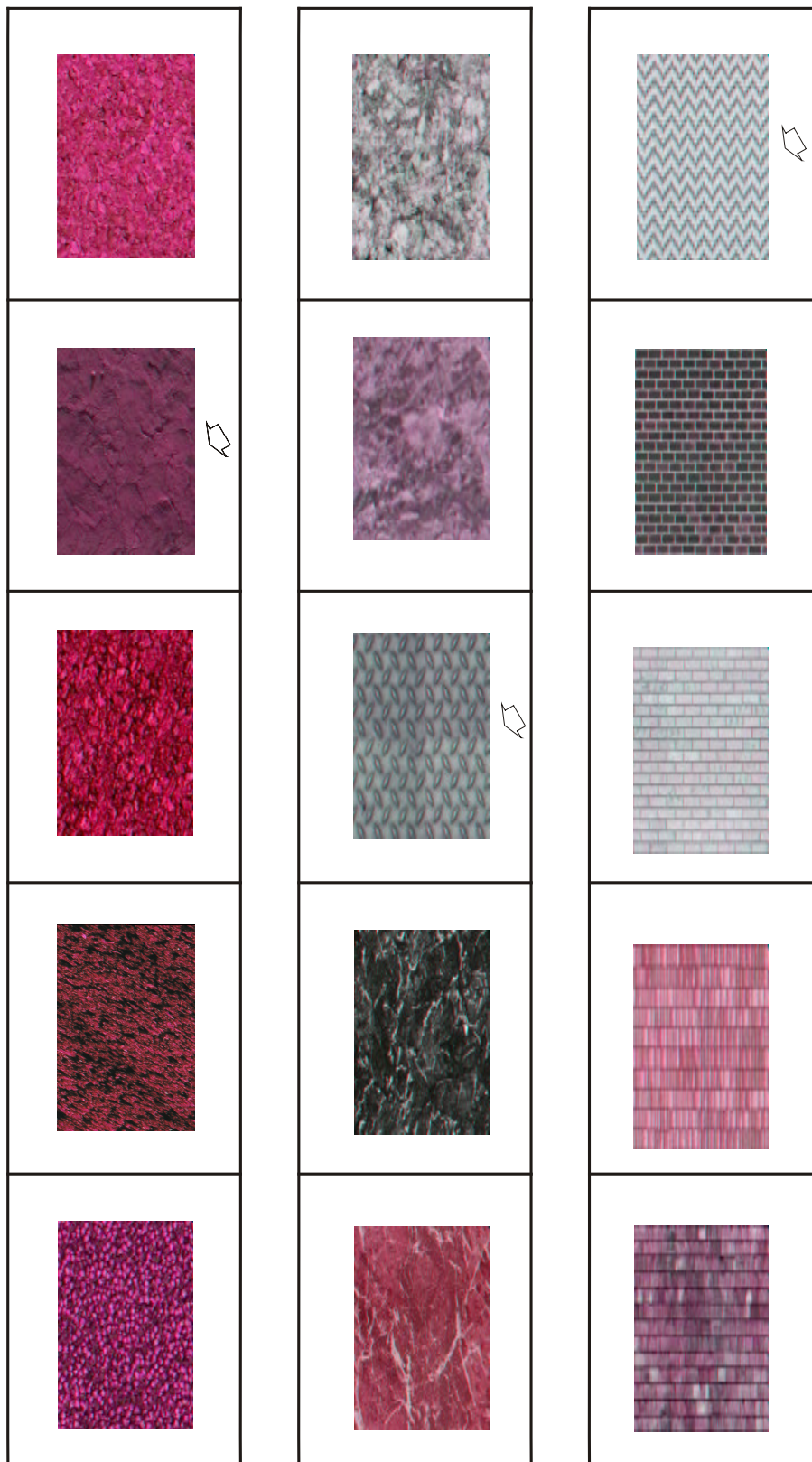
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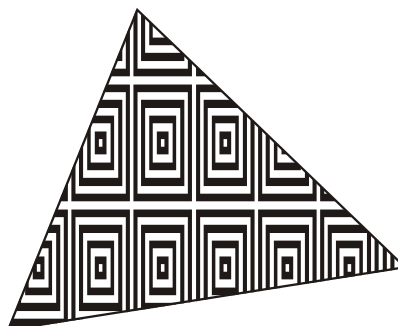
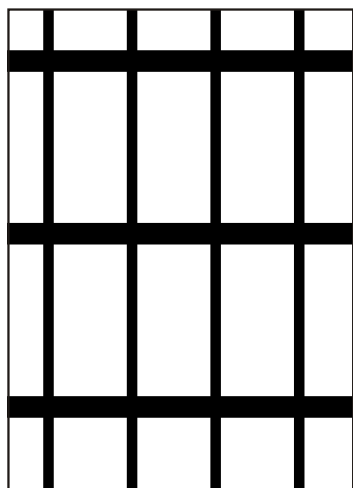
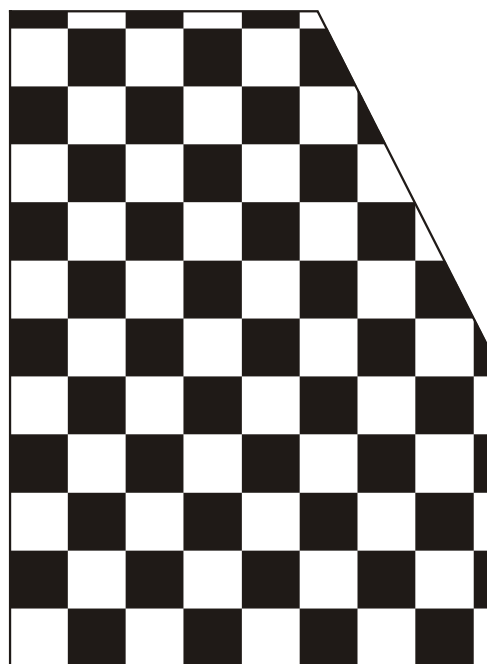
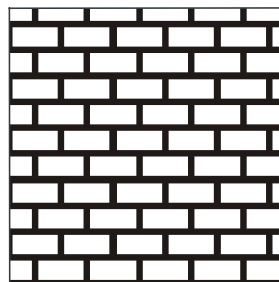
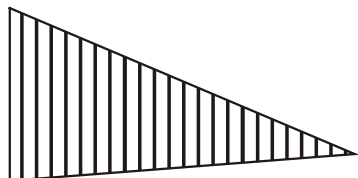
**WORK IT
OUT****Sequences
"Tiles"****19-12****Level 1
Exercise 2**

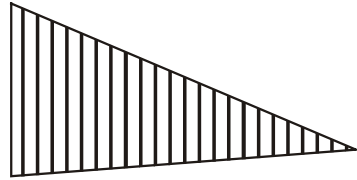
<i>Aims</i>	<ul style="list-style-type: none">- Practising observing and comparing.- Practising looking for the superfluous element in a sequence.- Practising looking for the criterion on which a sequence is based.
<i>Applications (examples)</i>	<p><u>In class:</u> any activity involving comparing data to harmonise two proportional factors, reading and understanding instructions for homework, proof-reading and also anything involving the formulation of plausible hypotheses, the definition of criteria and the access to qualitative criteria.</p> <p><u>At work:</u> any job involving indirect relationships, for example in the building trade where proportions are important to mixtures, gardening when mixing fertiliser and insecticide. Also ordering and putting stock away, quality control in many different situations (building work, decorating, the food industry, the textile industry, cleaning etc; looking for the cause of the breakdown and other anomalies; looking for changes (ripeness, wear and tear etc.)</p> <p><u>In everyday life and leisure:</u> any activity involving relating different types of data to one another: size, weight, volume (for example while cooking or doing some DIY). Also anything involving health and safety, training children in the prevention of accidents, noticing anomalies which could be dangerous, operating machinery etc.</p>
<i>Materials</i>	A sheet of paper with three separate sequences of tiles, going from the lightest to the darkest and including a superfluous element.
<i>Instructions</i>	The students have to identify the superfluous tile and explain precisely why the tile is superfluous to the sequence.
<i>Comments</i>	The students may wish to number the tiles to make the explanation of their choice easier,
<i>Variations (examples)</i>	The students may look for other criteria on which to base a sequence of tiles, for example shape, size, colour, texture, pattern etc.
<i>Individualisation</i>	Yes.
<i>Answers</i>	Yes, as an example.



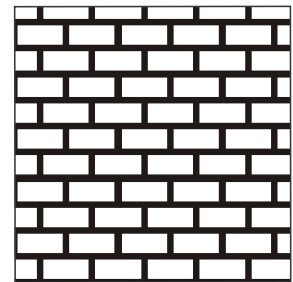


<i>Aims</i>	<ul style="list-style-type: none">- Practising ordering geometrical shapes in a sequence, from the smallest to the largest.- Practising ordering abstract shapes in a sequence, from the lightest to the darkest.
<i>Applications (examples)</i>	<p><u>In class:</u> any mental activity involving the identification of criteria for differentiation. This is useful in Maths or in reading comprehension: identifying sequences (words related through syntax, numbers related through symbols); also comparing data to harmonise two proportional factors, reading and understanding instructions for homework, proof-reading and also anything involving the formulation of plausible hypotheses, the definition of criteria and the access to qualitative criteria.</p> <p><u>At work:</u> any job involving indirect relationships, for example in the building trade where proportions are important to mixtures, gardening when mixing fertiliser and insecticide. Also ordering and putting stock away, quality control in many different situations (building work, decorating, the food industry, the textile industry, cleaning etc; looking for the cause of the breakdown and other anomalies; looking for changes (ripeness, wear and tear etc.) In catering, maintaining the correct proportion of ingredients despite a difference in shape.</p> <p><u>In everyday life and leisure:</u> any activity involving relating different types of data to one another: size, weight, volume (for example proportions while cooking, doing some DIY). Differentiating between different pieces of cloth or different parts of a pattern while sewing, dealing with the different parts of a piece of furniture or a machine when putting them together etc.</p>
<i>Materials</i>	A sheet of paper with drawings of different cloth samples.
<i>Instructions</i>	<p>The students have to order the sequence according to size, from the largest to the smallest. To report their result, they need to number the samples: 1 for the largest piece down to 6 for the smallest.</p> <p>Then the students have to order the sequence according to brightness, from the lightest to the darkest.</p>
<i>Comments</i>	Discussions may arise about the comparative sizes of the square, circular and triangular pieces. The teacher can then point out the need for calculation of the surface.
<i>Variations (examples)</i>	<ol style="list-style-type: none">1. The students may wish to know the exact size of each sample. The teacher can then help the students to discover how to calculate the surface.2. The students could compare their clothes and order them into sequences: cotton clothes from the lightest to the darkest, wool clothes from the warmest to the coolest, patterned clothes from the most heavily patterned to the least patterned etc.
<i>Individualisation</i>	Yes.
<i>Answers</i>	Yes, for the first sequence (sizes).

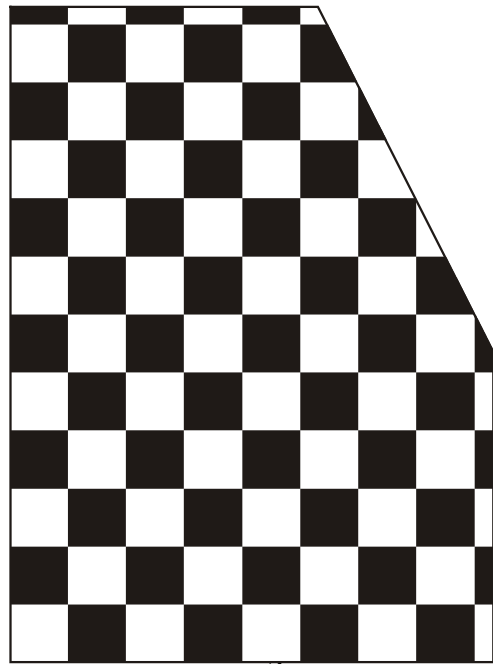




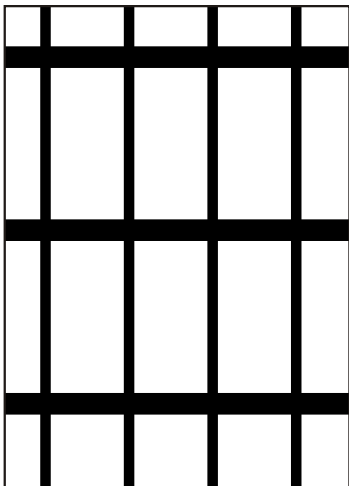
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