

| WORK IT OUT | Categorising -sets and sub-sets "Zoology" | 12-31 Level 3 Exerciset 1 |
|------------------------------------|---|--|
| Aims | <ul style="list-style-type: none"> - Practising working with sets. - Practising sorting sets into groups and sub-groups. | |
| Applications (examples) | <p><u>In class</u>: any mental operation involving finding a sorting criterion to make sets and sub-sets, for example grammatical rules in English or other languages, mathematical problems etc..</p> <p><u>At work</u>: any job involving cataloguing, sorting, tidying, arranging components, items or objects according to given criteria (labelling, packing, stocking, stamping, separating etc.) Jobs requiring this mental ability are numerous in manufacturing, retailing and office work, as well as in other sectors like market-gardening, catering, ICT, fashion design, maintenance and repair of machines and vehicles.</p> <p><u>In everyday life and leisure</u>: any activity involving cataloguing according to criteria that are given or need to be worked out: organising a stamp or a postcard collection or other activities involving albums/storage systems and display criteria; games (card games, jigsaws); stowing objects in boxes or predetermined areas (tools, sewing implements, buttons). Interior decoration also uses this skill, as does the organisation of activities for clubs, sporting events etc...</p> | |
| Materials | A sheet of paper with the names of animals and insects. | |
| Instructions | The students have to separate the animals and insects into several sets according to self-determined criteria and rules. Each set has to contain at least two sub-sets. | |
| Comments | <ol style="list-style-type: none"> 1. The words can be cut out to facilitate sorting. 2. After reporting, students can synthesise all their answers into a group one. | |
| Variations (examples) | <ol style="list-style-type: none"> 1. The teacher can ask the students to draw their sets and sub-sets showing overlaps. 2. The students can make their own list of animals, different from the ones in the exercise. Each of them can then sort the animals into sets and sub-sets. | |
| Individualisation | Yes. | |
| Answers | Yes, but only as an example. | |

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Categorising -sets and sub-sets

12-31

"Zoology"

bee

mouse

tiger

elephant

fly

crocodile

goat

ostrich

swallow

flea

eagle

bear

boa

sparrow

lion

lizard

spider












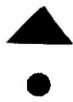


















| WORK IT OUT | Categorising -sets and sub-sets "Funny shapes" | 12-32 Level 3 Exercise 2 |
|--------------------------------|---|---|
| Aims | <ul style="list-style-type: none"> - Practising working with sets. - Practising sorting sets into groups and sub-groups. | |
| Applications (examples) | <p><u>In class</u>: any mental operation involving finding a sorting criterion to make sets and sub-sets, for example grammatical rules in English or other languages, mathematical problems etc..</p> <p><u>At work</u>: any job involving cataloguing, sorting, tidying, arranging components, items or objects according to given criteria (labelling, packing, stocking, stamping, separating etc.) Jobs requiring this mental ability are numerous in manufacturing, retailing and office work, as well as in other sectors like market-gardening, catering, ICT, fashion design, maintenance and repair of machines and vehicles.</p> <p><u>In everyday life and leisure</u>: any activity involving cataloguing according to criteria that are given or need to be worked out: organising a stamp or a postcard collection or other activities involving albums/storage systems and display criteria; games (card games, jigsaws); stowing objects in boxes or predetermined areas (tools, sewing implements, buttons). Interior decoration also uses this skill, as does the organisation of activities for clubs, sporting events etc...</p> | |
| Materials | A sheet of paper with 30 boxes containing 30 different shapes. | |
| Instructions | The students have to separate the shapes into several sets according to self-determined criteria and rules. | |
| Comments | <ol style="list-style-type: none"> 1.The boxes can be cut out to facilitate sorting. 2. After the first student has explained the rationale behind his/her sorting, it would be more interesting for the group if they could participate directly by working out the sorting criteria of the subsequent students themselves, as a group activity. | |
| Variations (examples) | <ol style="list-style-type: none"> 1. The teacher could ask the students to put forward a list of objects which the group can write down or draw. Subsequently, each student can sort the objects into sets and sub-sets. 2.The students could list all their surnames. Then each of them could sort the names into sets and sub-sets. | |
| Individualisation | Yes. | |
| Answers | No. Many different criteria can be applied. | |

Categorising -sets and sub-sets

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12-32

"Funny shapes"

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| WORK IT OUT | Categorising -sets and sub-sets | 12-33 Level 3 Exercise 3 |
|--------------------------------|---|---|
| Aims | <p style="text-align: center;">"First names"</p> <ul style="list-style-type: none"> - Practising working with sets. - Practising sorting sets into groups and sub-groups. | |
| Applications (examples) | <p><u>In class</u>: any mental operation involving finding a sorting criterion to make sets and sub-sets, for example grammatical rules in English or other languages, mathematical problems etc..</p> <p><u>At work</u>: any job involving cataloguing, sorting, tidying, arranging components, items or objects according to given criteria (labelling, packing, stocking, stamping, separating etc.) Jobs requiring this mental ability are numerous in manufacturing, retailing and office work, as well as in other sectors like market-gardening, catering, ICT, fashion design, maintenance and repair of machines and vehicles.</p> <p><u>In everyday life and leisure</u>: any activity involving cataloguing according to criteria that are given or need to be worked out: organising a stamp or a postcard collection or other activities involving albums/storage systems and display criteria; games (card games, jigsaws); stowing objects in boxes or predetermined areas (tools, sewing implements, buttons). Interior decoration also uses this skill, as does the organisation of activities for clubs, sporting events etc...</p> | |
| Materials | A sheet of paper with 20 first names. | |
| Instructions | The students have to separate the names into several sets according to self-determined rules and criteria. | |
| Comments | <ol style="list-style-type: none"> 1. The names can be cut out to facilitate sorting. 2. After reporting, students can amalgamate all their answers into a group one. | |
| Variations (examples) | <ol style="list-style-type: none"> 1. The teacher could ask the students to put forward a list of objects relating to a specific sphere or sector, for example cooking, catering, retailing, clothes etc. The group can write down or draw that list. Subsequently, each student can sort the objects into sets and sub-sets. 2. The students could list all the first names of the people in their group and of their own family. Then each of the students could sort the names into sets and sub-sets. | |
| Individualisation | Yes. | |
| Answers | No. Many different criteria can be applied. | |

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Categorising -sets and sub-sets

12-33

"First names"

ANNA

CATHERINE

PAUL

JOHN

CHRISTINE

JENNIFER

JANE

ALEX

MARIA

ROBERT

MARIO

CHARLES

JESSICA

PAT

JAMES

MAURICE

CAROL

ANGELA

ANNE

ARTHUR