PDST

Professional Development Service for Teachers | **An tSeirbhís um Fhorbairt Ghairmiúil do Mhúinteoirí**

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Graphic Organisers
in
Teaching and Learning

Post-Primary Resource

Please cite as: PDST, *Graphic Organisers in Teaching and Learning,* Dublin, 2016

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Acknowledgements

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Table of Contents

Introduction

Graphic Organisers provide a visual method of developing, organising and summarising students' learning. They help to structure disjointed information. They facilitate the learning process by providing a scaffold for the development of ideas and the construction of knowledge. High quality teaching in a mixed ability classroom is also facilitated.

Highest quality results are achieved when one organiser is shared by a small group of (2/3) students with diverse abilities and learning preferences. Leadership is distributed in the group with each student having a role to fulfil, eg. Recorder, Timekeeper, Turn-taker, Summariser, Reporter, Clarifier, Checker, Scout, etc.

The resource needs only pen and paper to use.

Some organisers are more applicable to the different aspects of the learning process than others, for example : collecting information, comparing and contrasting, developing ideas, sequencing information, summarising and extending thinking and learning. Some are also more relevant to different subjects and topics than others. They can all be used at the various stages of the learning process:

- Pre-teaching
- Introducing a topic
- Teaching a topic
- Independent learning
- Study and revision
- Preparing answers to examination questions

They scaffold learning and help to build student confidence. They also facilitate formative assessment as students can clearly see how much they understand.

Detailed explanations on how to use each organiser are provided throughout the book.

Contents of Book:

Section 1
1. Guidelines on how to use each Graphic Organiser
2. A list of suggestions for possible uses of each organiser that teachers have shared at CPD days
3. Completed and in some cases adapted organisers shared by practising teachers

Section 2
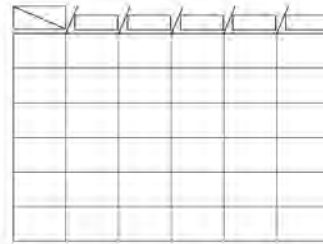A set of blank Graphic Organisers (which may be photocopied) for use in the classroom.
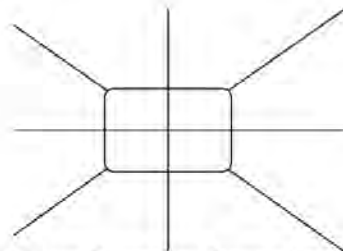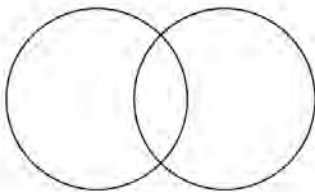
Ranking Ladder

Four Corner Organiser

Tri Pie

Brain Droplets

Cross Classification Chart

Funnel

Double Venn
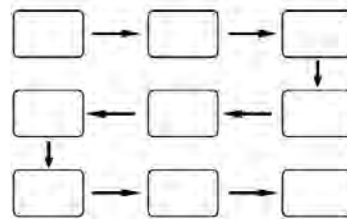
Sequence Chart
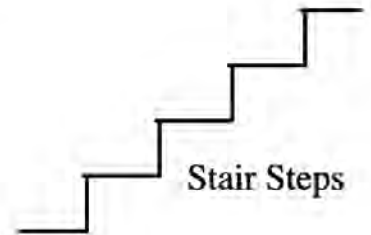
Stair Steps
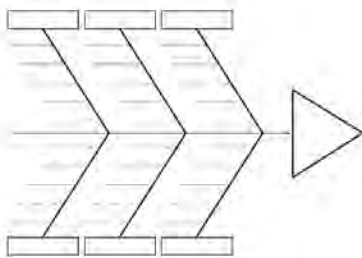
Fish Bone
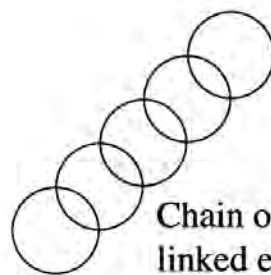
Chain of linked events
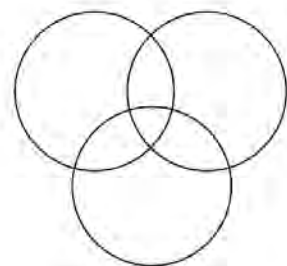
Triple Venn
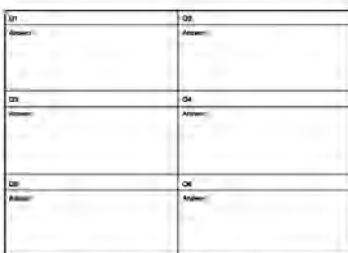
Research Grid

Star Burst

Ranking Ladder
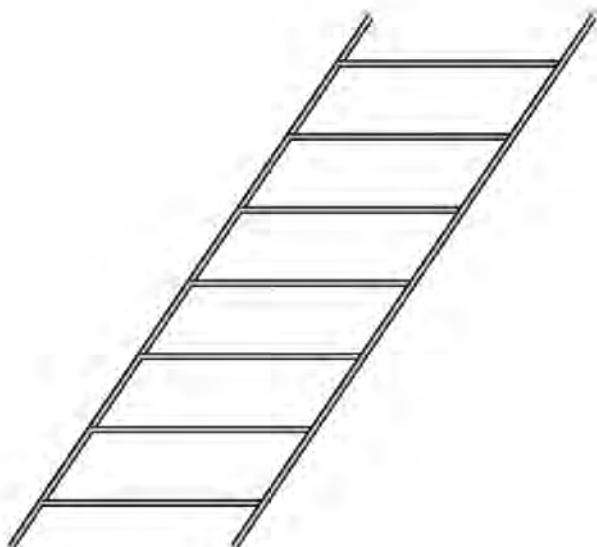
This ladder can be used to prioritise or rank ideas and/or information. It can also be used for topics with a series of stages or steps. It is suitable for subject matter with a definite beginning and end.

At the pre-teaching stage the teacher can have pairs/triads of students fill in any information they know about the topic on the correct step. The teacher can monitor the results and then focus the teaching more accurately on the needs of the class.

Active learning can be facilitated if the teacher provides the information in jumbled form and students work together to rank the information correctly.

Suggestions from teachers

History
- Becoming a Knight
- Cortés and the Aztecs
- Life of George Washington
- Rise and Fall of Third Reich
- Work of an archaeologist

Business
- Writing a letter
- A business transaction
- Making a complaint
- Recruitment
- New product development
- Calculate net pay
- Household Budget
- Bank Reconciliations

Home Economics
- Digestion of proteins
- Production of cheese
- Milling flour
- 10 steps of HACCP
- Making a Christmas wreath
- Design Brief
- Yoghurt making

Music
- Answering an examination question on harmony
- Writing a melody
- Scales
- Musical Eras
- Composers

Mathematics
- Order of operations
- Solving a triangle
- Proving a theorem
- Difference Equations
- Differentiation from first principles

Geography
- Cloud formation
- Formation of an ox-bow lake
- Volcanic eruption
- Formation of a waterfall
- Water cycle

English
- Descent of a tragic hero into calamity, e.g. Macbeth's descent into evil
- Trace the theme of a poem — thread of thought, main idea
- Stages of a Novel

Religion
- Stages from slavery to Passover
- The development of Islam
- From the Passion to Pentecost

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Approach to Harmony Question

Double check bass notes, match chord selected above

Fill in the bass notes in the style of the given opening

Fill in the chord progressions

Examine the melody – each note and each bar. Plot possible chord choices over each box

Identify the Cadence points – write out good progressions

Establish the Key signature, fill in the grid appropriately
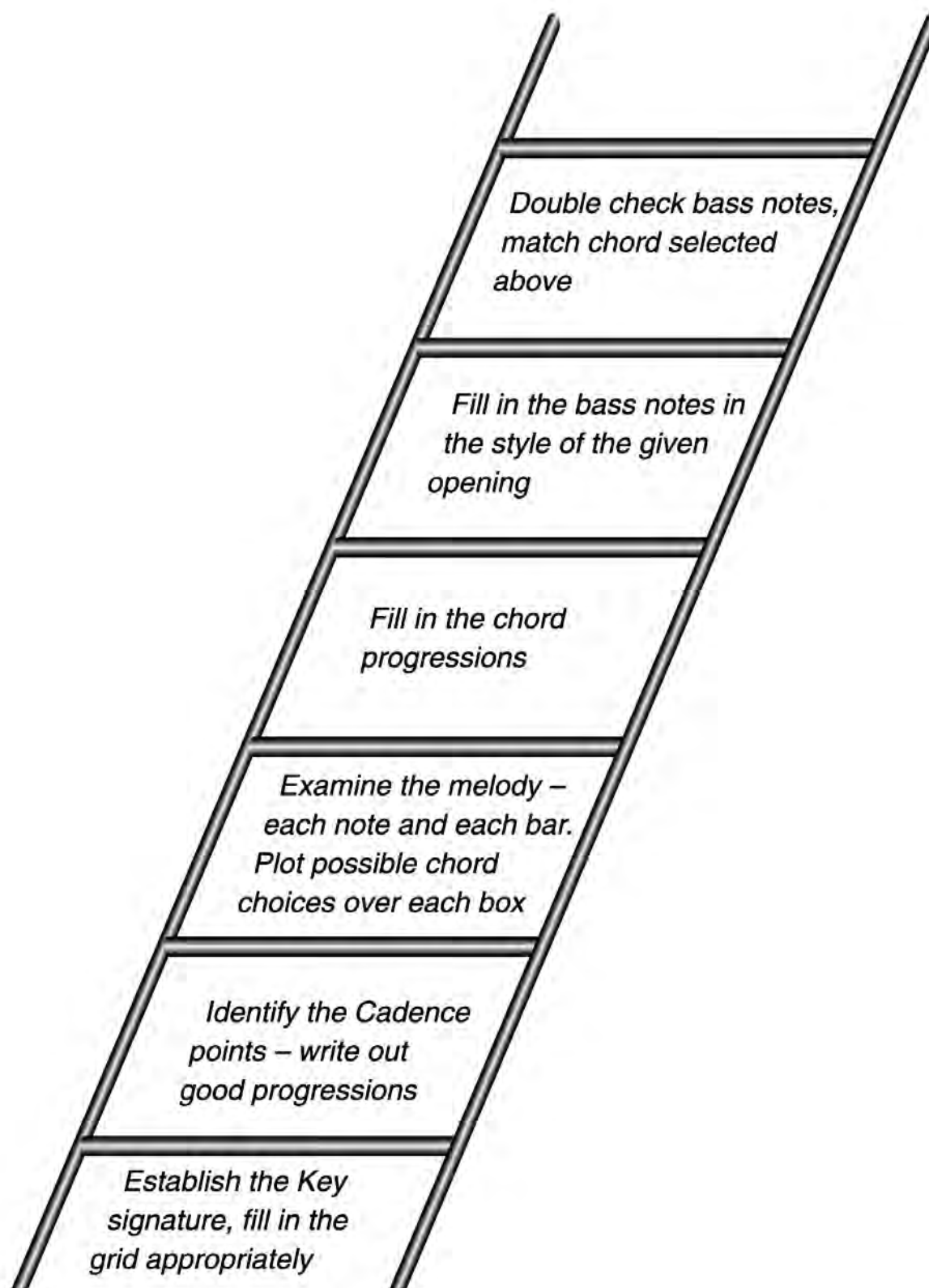
Pizarro and the Incas

The desire for gold led Francisco Pizarro to explore and conquer the Inca empire of South America. However, his conquest of the Incas was a bloody one, filled with violence and double-crossing treachery. After years of intense fighting and explorations, Pizarro was murdered over the land he had conquered.

June 1541

1540

August 1533

April 1531

Jan 1531

1470

PDST
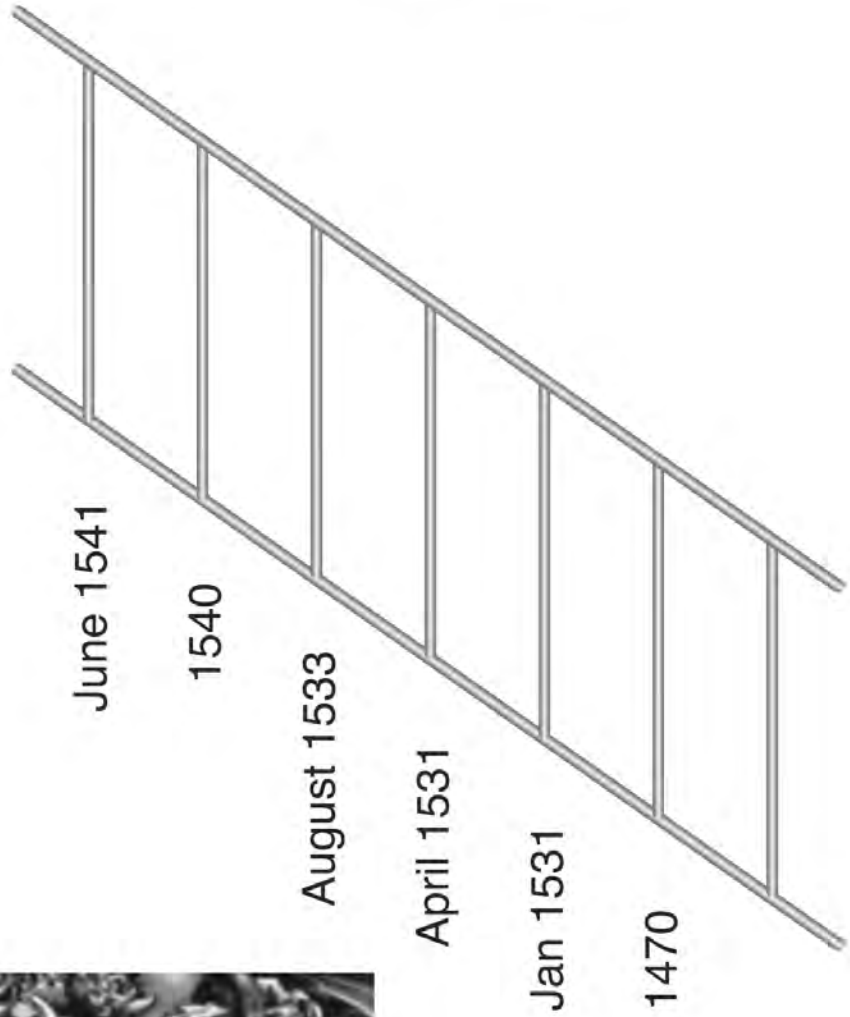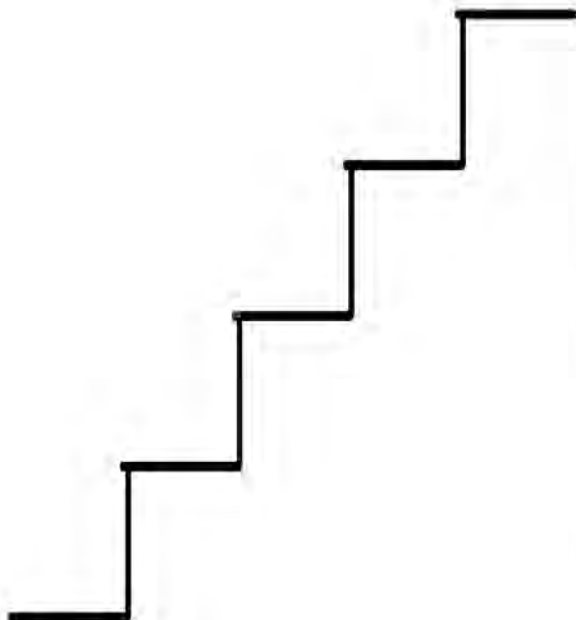
Stair Steps

Stair steps can be used when a topic involves a step by step process or for plotting a course of action. It can sometimes be used interchangeably with the step ladder. Pupils can show preferences for particular models depending on their learning style.

Learning is most effective when pupils work in small groups. They share and bounce ideas off each other. They can clarify and extend each others learning and they gain in confidence.

Pupils practice the interpersonal skills of listening and explaining, summarising, questioning, clarifying and extending each others ideas. They can be taught to praise each others ideas and to work together. Work completed on a shared Graphic Organiser can be reproduced at home for study/revision.

Suggestions from teachers

Gaeilge
- Struchtúr a léiriú e.g. Struchtúr abairte
- Codarsnachtaí idir aidiachtaí a léiriú
- Céimeanna sa litir
- Aistí

Music
- Development of Western Classical Music
- Triads - backing chords
- Tonic solfa notation

Science
- Steps in the scientific method
- Levels of organisation
- Steps in digestion
- Steps in separation of rock salt

Modern Language/ Geography
- Telling the time
- Oral Project work
- Costal erosion features
- Atmosphere readings

Business/Accounting
- Formation of Private Company
- Resource management
- Business transaction
- Making a complaint
- Taking out insurance
- Decision making in the EU
- Steps in Financial Accounts

PE/History
- Free throw in basketball
- Forward roll
- Renaissance - artists, sculptors, writers

Mathematics
- Linear Programming
- Differentiate from first principles

Art
- Movements in Art
- Life of Monet

Preparer le Document Oral

EXAMEN BLANC

Entraînement avec un autre élève

Vérification pour le professuer

Préparer des réponses possibles

Établir une liste de questions avec vos amis; votre famille

Choisir un document

PDST
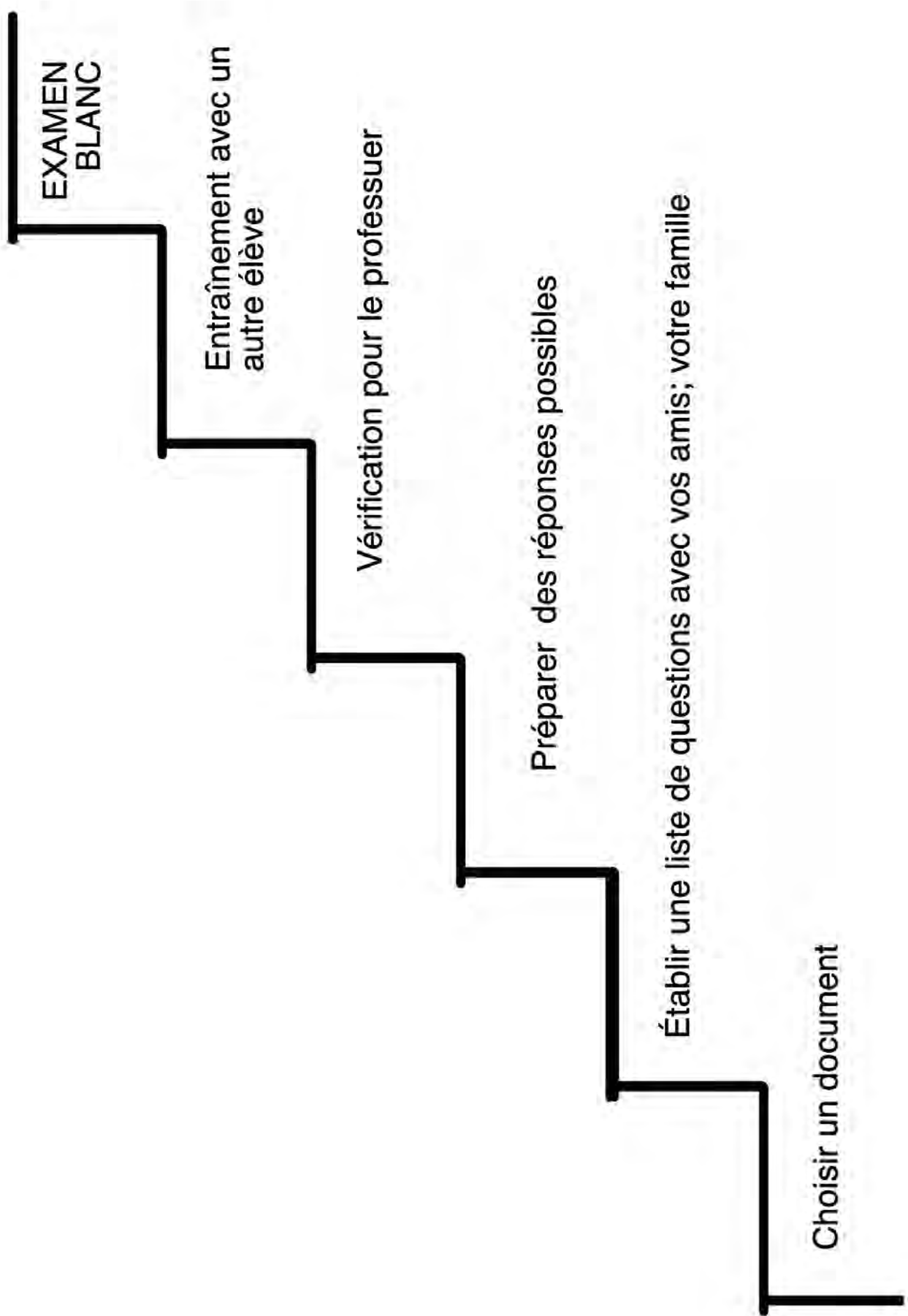
Chain of Linked Events
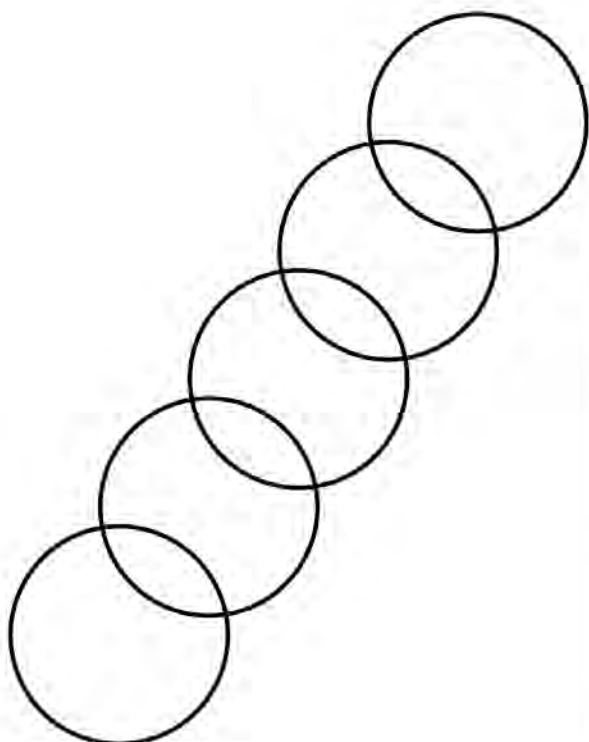
When a teacher wishes to build links between events or when the topic involves a series of interlinked events, this model can be used. This visual method assists students who find it difficult to memorise from notes. It can help to bring coherence to a large quantity of information and to establish or clarify the links in the pupil's mind.

As with previous organisers it can be used for pre-teaching i.e. identify what pupils know about the topic so teaching can be accurately focused at the level of students knowledge. It can be used for teaching a topic where information is provided in disjointed form and pupils have to link it correctly.

It works best when a small group (2/3) students work together. One *records* agreed information on the model, one *researches*, one *ensures* that all contribute ideas and reach consensus or *checks* that all understand the material.

Suggestions from teachers

Gaeilge

- Scéal a chumadh má thugtar an chéad abairt
- Aiste a scríobh – na tuairimí a bhailiú le chéile in altanna
- Aiste don Árdteist — Sláinte

History

- Plantations
- Formation of new State
- War of Independence
- Irish Civil War
- 1916 Rising

Science

- Microscopic study of plant cells
- History of the atom

Technology

- Trees — seeds to recycling

Art/Music

- Art movements early 20th Century
- Composition
- Cord Progressions/ cadences

Geography

- Economic/Social effects of natural disasters
- Features of costal erosion

Home Economics

- Making cheese
- Digestion of proteins
- Development of family in Ireland

Business

- Introducing new product to the market
- Solving a Trade Dispute
- Product Life Cycle

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King Lear's decision to divide his kingdom

Dénouement
Deaths of tragic hero and central characters

Lear "sees" better

Storm and descent into madness

Gradual loss of power and status

Lears' dependence on two daughters for shelter and sustenance

Cordelia and Kent Banished

Daughters' forced declaration of love and Cordelia's refusal

Division of Kingdom

Lear's rash impulsive nature

Digestion (Mitch*)

Mouth
Physical and chemical
digestion begin

Oesophagus
Peristalsis begins

Stomach
Physical and Chemical Digestion
continue

Small Intestine
Digestion completed and Absorption
for assimilation of food begins

Large Intestine
Absorption of H_2O

Rectum and Anus
Egestion

* Mitch was designed and named by an imaginative colleague!

Sequence Chart
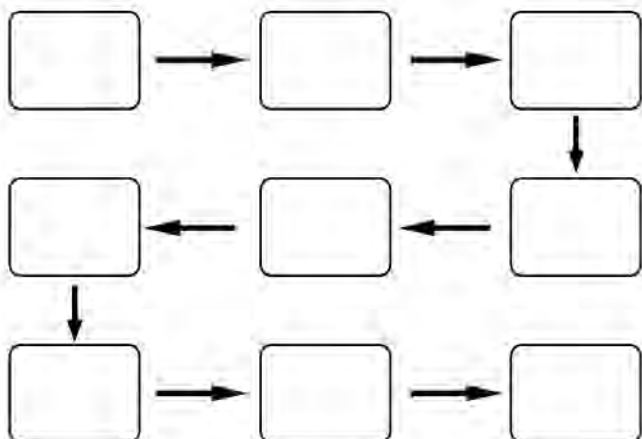
When a topic involves a sequence of events this organiser can be helpful. It is particularly useful when multiple or sequential factors need to be put in order and remembered.

It is effective for pre-teaching and teaching the causes of an event. Pupils work together to correctly sequence disordered information. They are actively engaged in constructing the learning. They need to discuss and agree on the correct answer(s).

A group can consult with another group if they are unsure about their answers. The teacher may have a rule that s/he only be asked for clarification if another group has been unable to help.

For some students the teacher may provide information in jumbled form to be correctly sequenced.

Suggestions from teachers

Gaeilge/Modern Language
- Scéal a chumadh má thugtar an chéad abairt
- Aiste a scríobh – na tuairimí a bhailiú le chéile in altanna
- Aiste don Árdteist – Sláinte
- Teicnící Fileata
- Writing a postcard or message

English
- Trace sequence of events in plot of a text (novel, play, film, etc.)
- Outline progress of thought in a poem

History
- Rise of Hitler
- Downfall of Parnell
- Renaissance-Astronomy
- Magellan's Journey
- Life on Medieval Manor
- Feudal System
- Voyage of Columbas

Art
- Lino Printing Process
- Irish Art Time Line
- Colour Wheel
- Any craft at Junior Certificate
- Project Design
- Impressionist influences

Home Economics
- Procedure for cookery class
- Design & craftwork brief
- Any recipe

Geography
- Rock Cycle
- Water Cycle
- Formation of a river feature
- Weathering - Freeze, Thaw action
- Plotting a Journey

Music
- Any Symphony
- Melody Writing
- Writing 16 bar melody
- Composition
- Set Works (form and structure)

Technical Subjects
- Design Brief
- Drilling

Causes of Second World War

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┌──────────────────┐          ┌──────────────────┐          ┌──────────────────┐
│    Economic      │          │                  │          │                  │
│   Conditions     │  ──────▶ │  Weimar Germany  │          │ Invasion of      │
│   (post-war      │          │                  │          │    Poland        │
│   depression)    │          │                  │          │                  │
└──────────────────┘          └──────────────────┘          └──────────────────┘
         ▲                             │                             ▲
         │                             ▼                             │
┌──────────────────┐          ┌──────────────────┐          ┌──────────────────┐
│                  │          │                  │          │                  │
│   Guilt Clause   │          │  Ideologies      │          │   Appeasement    │
│                  │          │  Taking Root     │          │                  │
└──────────────────┘          └──────────────────┘          └──────────────────┘
         ▲                             │                             ▲
         │                             ▼                             │
┌──────────────────┐          ┌──────────────────┐          ┌──────────────────┐
│                  │          │  Wall Street     │          │ Hitler's         │
│      WW1         │          │     Crash        │  ──────▶ │ Aggressive       │
│                  │          │                  │          │ Foreign Policy   │
└──────────────────┘          └──────────────────┘          └──────────────────┘
```

Modh Cóinníolach

Ghlanf– →	Ghlanfainn	Ghlanfaidís
↑ Glanf–	↓ Ghlanfá	↑ Ghlanfadh sibh
↑ Glan	↓ Ghlanfadh sé →	↑ Ghlanfaimis
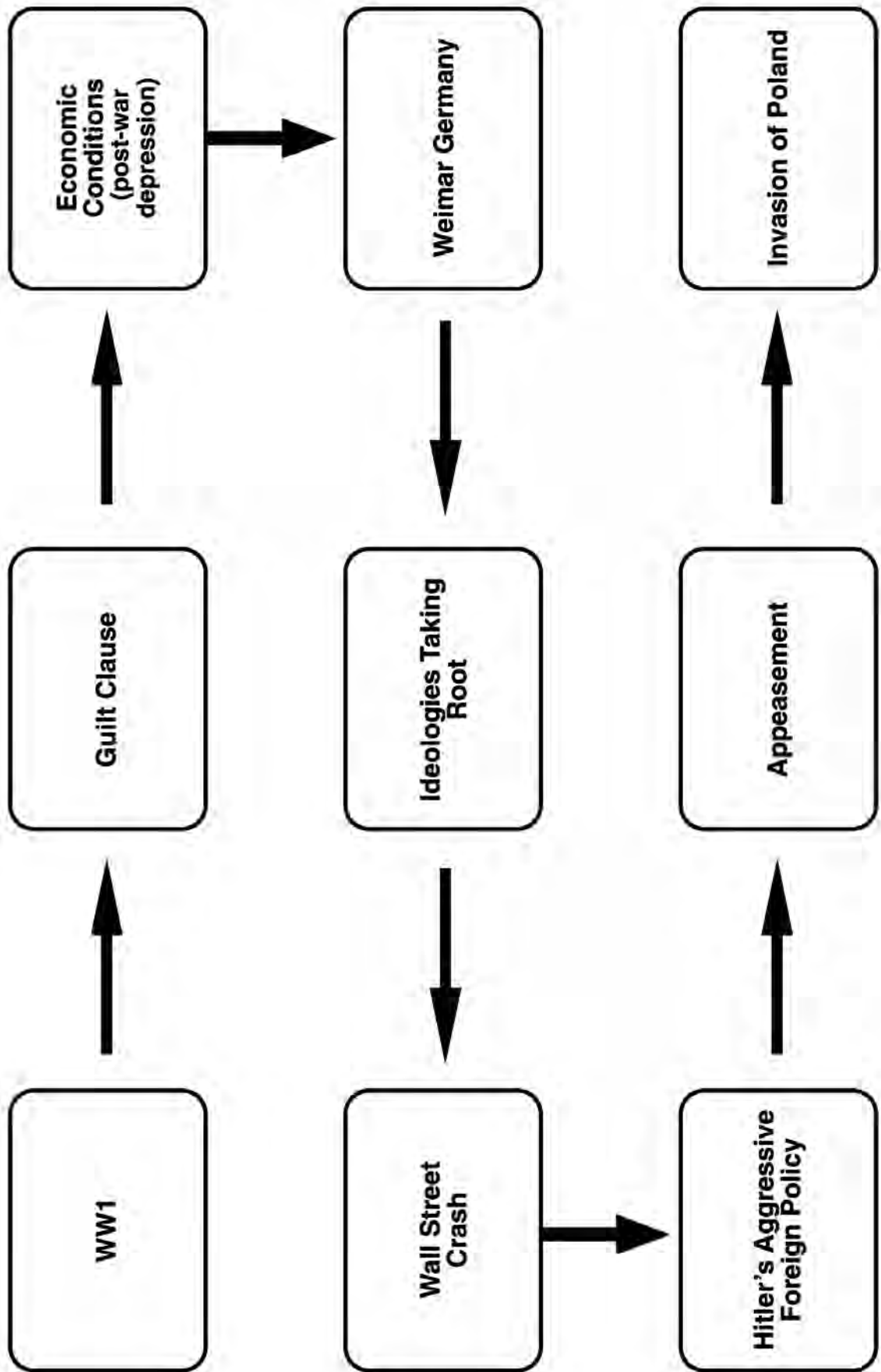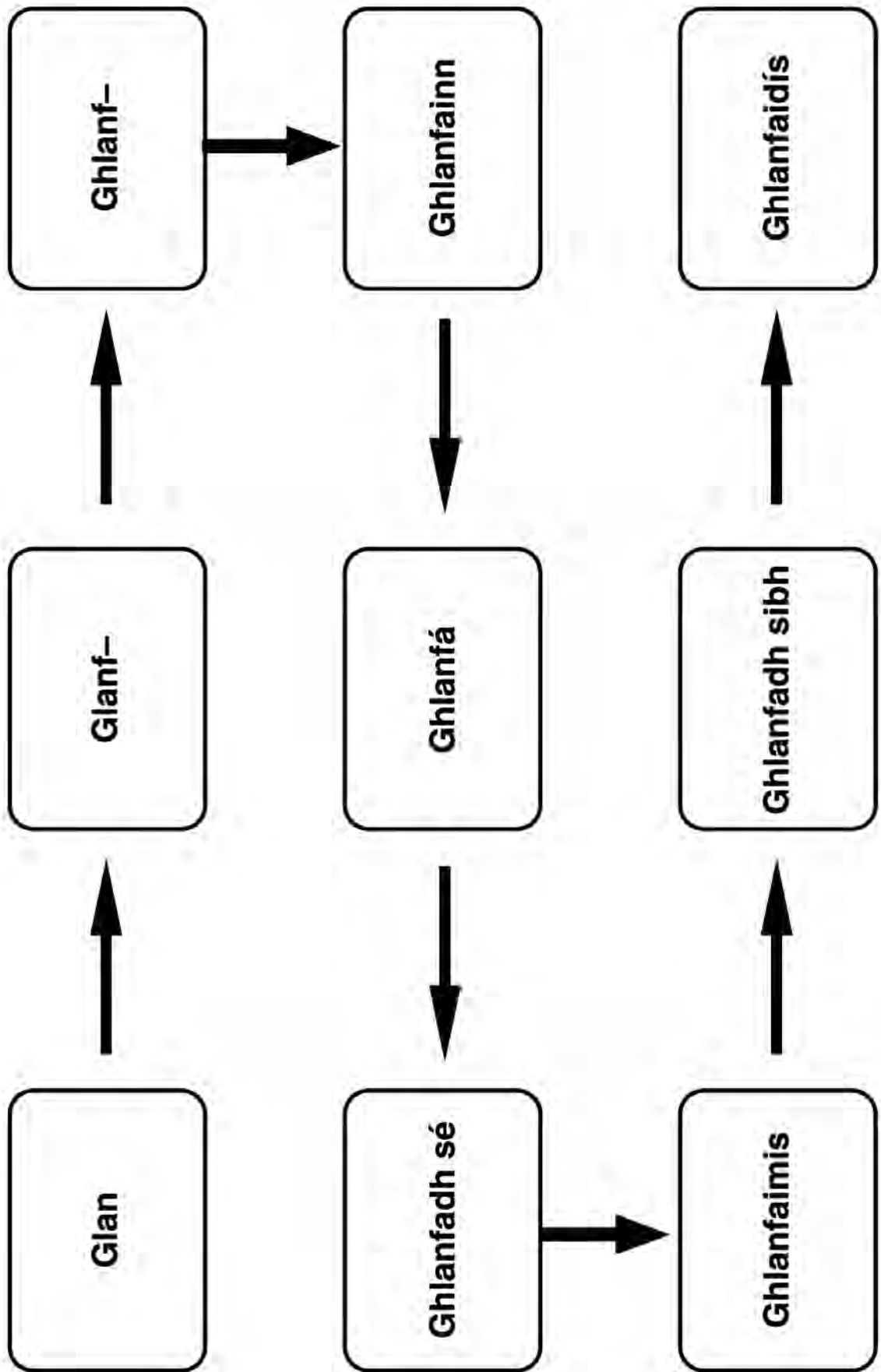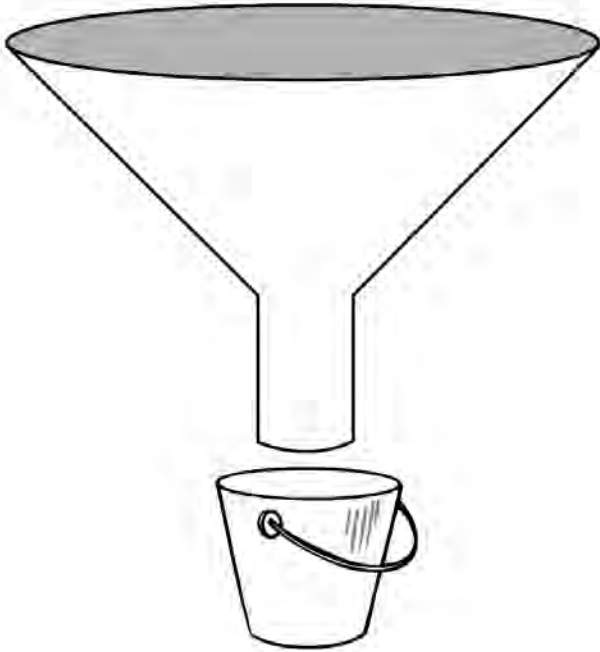
Funnel

When synthesising ideas, drawing conclusions, reducing a body of information to it's core e.g. creating a definition, this model is useful. All details, components or parts of the information or picture are placed inside the funnel. They emerge as a conclusion, definition or synthesis.

It can also be used to challenge or test pupils e.g. find the elements that are missing from the funnel.

Like other models it can prove a very potent tool for visual and kinaesthetic learners. It facilitates active experiential learning. Roles of *researcher, recorder* and *tester* may be assigned to students. The *tester* ensures that all will be able to answer questions posed by the teacher.

Suggestions from teachers

Science
- Rates of reaction
- Prep oxygen gas
- 7 characteristics of living things
- Photosynthesis
- Magnetic force
- Urine

History
- Causes of 1916 Rising
- Source of US economic Boom 1945-69
- Causes of any major event e.g. French Revolution, American Civil War of Independence

Geography
- Traffic Management
- The Burren
- Improving the environment
- Volcanos
- Earthquakes

Home Economics/ Technical Subjects
- Planning a craft project
- Healthy lifestyle
- Design brief
- Conics

Business/Maths
- Wage Negotiation
- Sale of Goods and Supply of Services Act 1980
- Sets

Gaeilge
- Foclóir a bhailiú faoi topaic ar bith.
- Tuairimí a bhailiú d'aiste.

Music/Art
- Jazz
- Dance
- Instruments of the orchestra
- Melody
- Impressionist and Post Impressionist painters

English/RE
- Essay preparation
- Persuasive writing
- My favourite place
- Components of Islam

Components of Fitness

cardiovascular endurance

muscular endurance

flexibility / suppleness

dynamic strength

static strength

power

speed

Fitness

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Elements of The Burren

250,000,000 years old

Limestone

Shale

Swallow Hole

Fossils

Stalactite

Flora

Stalagmite

Tourism

Goats

Fauna

Cave

Limestone Pavement

The Burren

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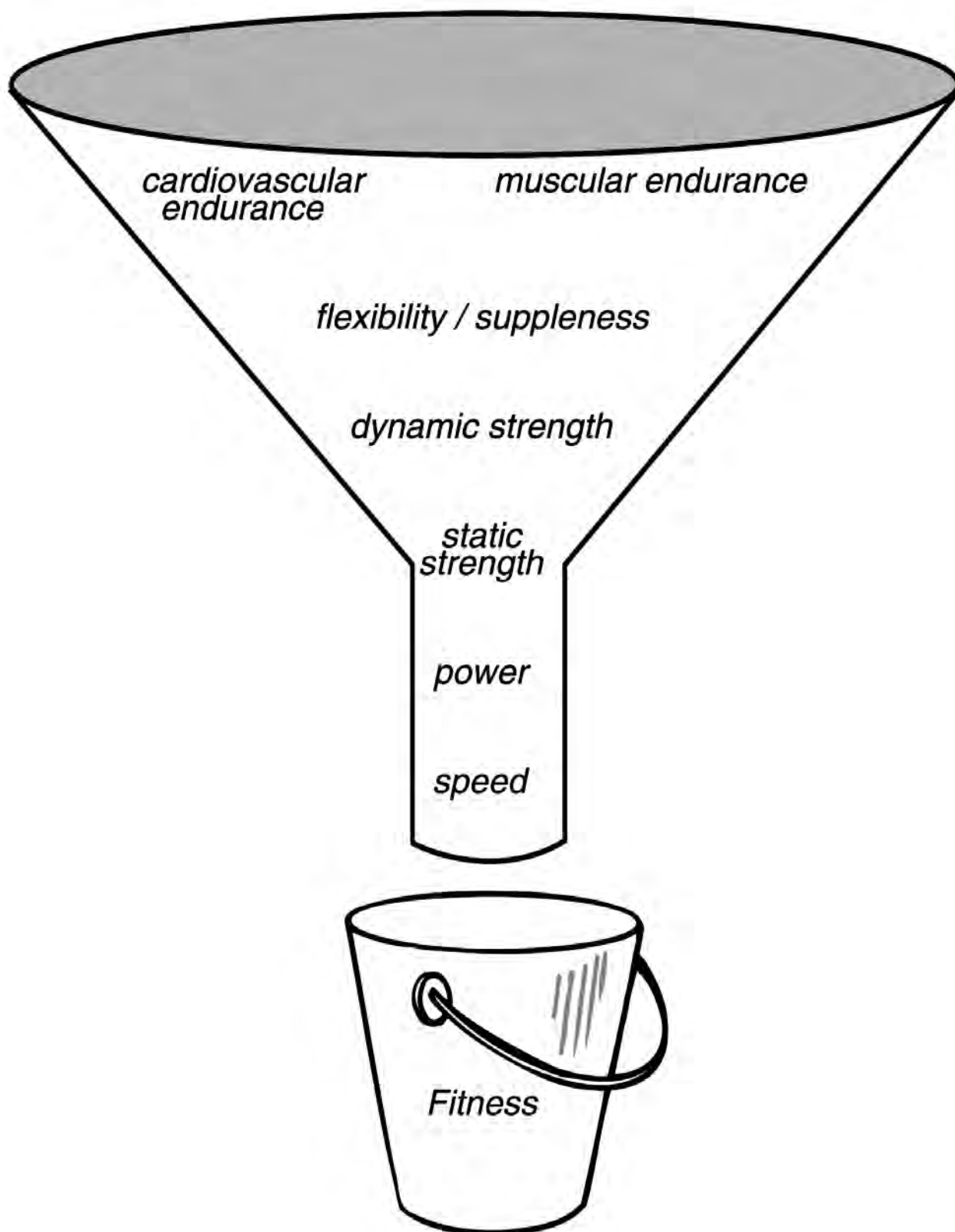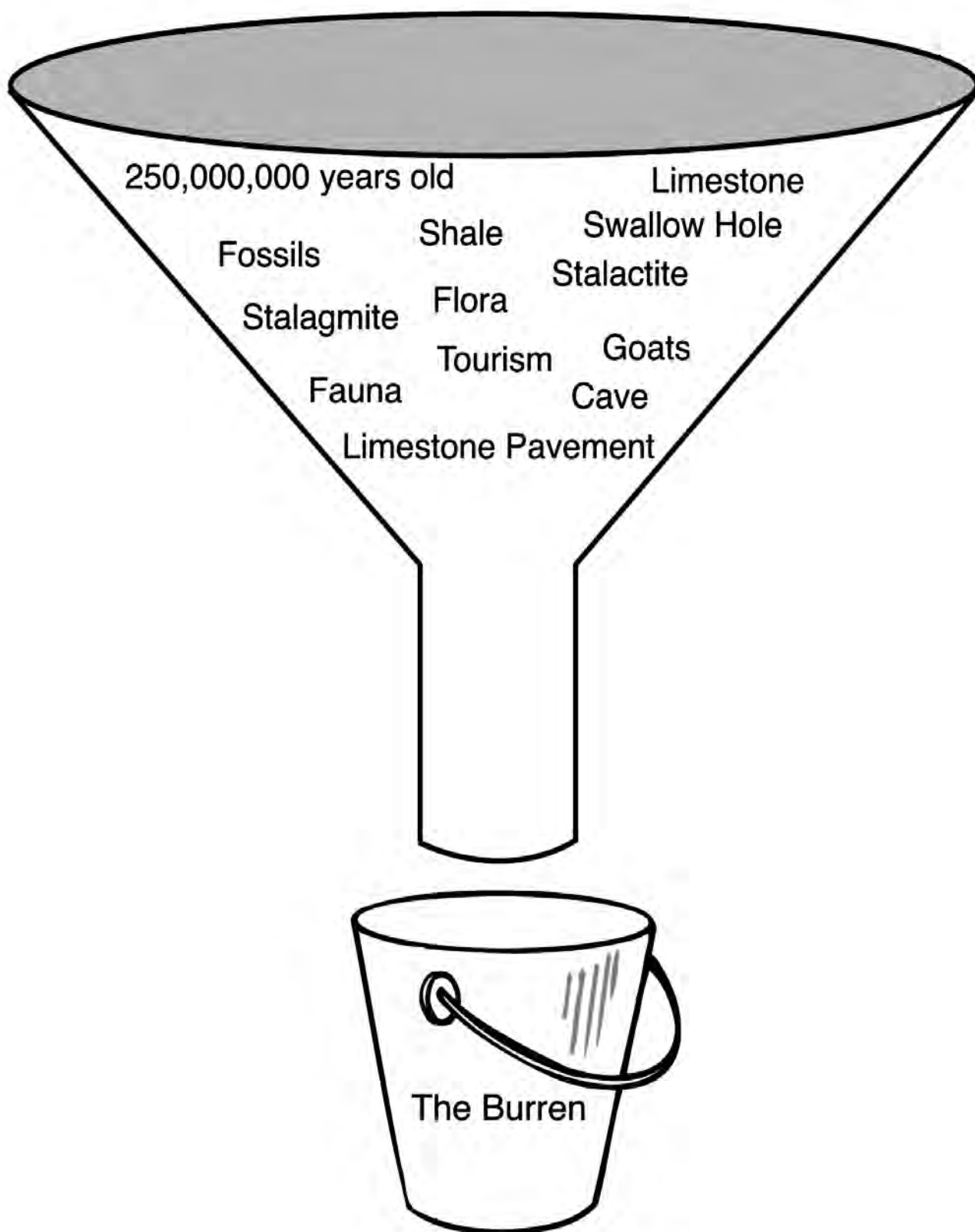
Influences on the Development of Cubism

Artists Involved

Characteristics of Cubism

Influenced by

Found in

Picasso, Braque, Léger, Lipchiyz

Photography
Geometric
shapes

Structure

Sculpture
and
Painting

CUBISM

PDST
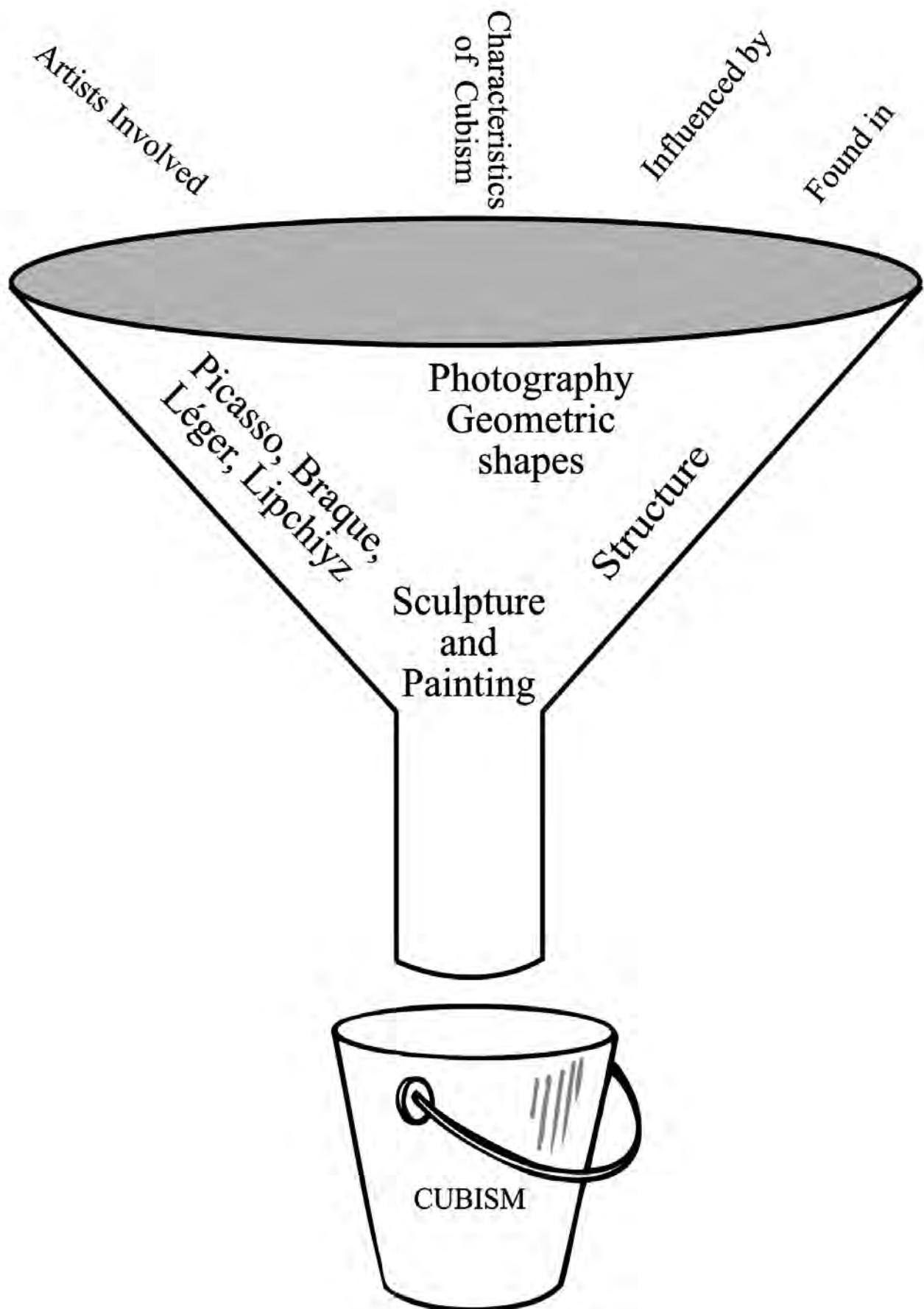
Fish Bone
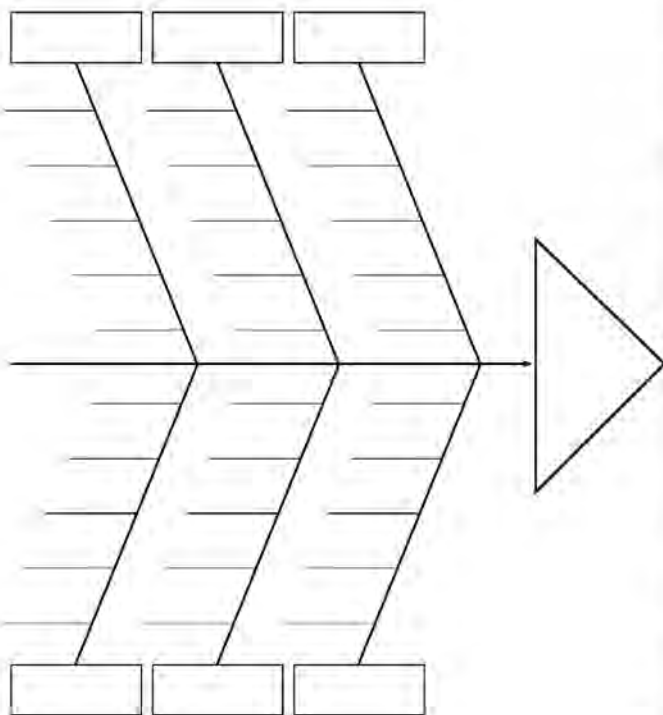
A whole topic may be summarised in one coherent space. Many students find that information summarised in this way is easier to remember than pages of text. It helps to organise and structure the information in a comprehensible form. It can help to collate factors associated with a complex topic and show how they interrelate.

Each fishbone is built by a small team (2/3). The teacher can supply the headings and pupils fill in the details. It is suitable for use in mixed ability groups and students can contribute according to their ability, perception and interest.

Intergroup cooperation is encouraged— one member may become *the scout* and seek out ideas from other groups.

Students may repeat the exercise for homework/revision and then use the organiser for self assessment when they return to class.

Suggestions from teachers

Maths
- Statistics
- Revision of formulae
- Sets - Key words/concepts

Modern Language
- The Family
- La Journée Scolaire
- La maison
- Topics for oral

History/Geography
- Ancient Ireland
- Reformation
- Summary of plantations
- Aspects of life in 1950s
- Mass movements
- Volcanos

Art
- Poster Design
- What is needed to learn to draw
- Painting Curriculum
- Graphic Design
- Modern Painting Schools

Science
- Organic chemicals
- Human systems
- Ecology
- Radioactivity
- 7 characteristics of living things
- Systems & organs of the human
- Water treatment

Business
- Forms of taxation
- Marketing Mix
- Law of Contract
- Consumer Law
- Marketing
- Insurance
- National Budget
- Financial Accounts

Home Economics/ Technical Subjects
- Balanced diet
- Fats
- Proteins
- Classify foods
- Meat
- Welding

PE/Music
- Physical fitness
- Dance
- PE variety of activities
- Family of instruments
- General study Junior Certificate Music

PE - Dance

Irish Dance

Contemporary step dance
- Upright posture
- Hands rigid
- Ball of foot
- Competitive
- Costume
- Walls of Limerick

Sean nós dance
- Loose posture
- Hand movement
- Flat of feet
- Casual
- Connemara

Solo dance types
- Jig 6/8
- Reel 4/4
- Slip Jig 9/8
- Hornpipe 4/4

Céilí dances
- Siege of Ennis
- Walls of Limerick

Set dances
- Half set
- Kerry

Group dances
- Polka 2/4
- Slide 2/4

Eggs

A mind map / fishbone diagram with the central topic "Eggs" branching into:

Structure: Shell, Yolk, White, Membrane, Air Cell, Chalazae

Dietetic: HBV Protein, Easy to digest, Growth & repair, Omega 3, Cholesterol, Suit convalescents

Nutrition: 13% sat. fat, 74% water, Iron, Sulphur, No Ca, No CHO, Few Vitamins

Grading: Registration, Class & size, Quantity, Storage, Provider

Cooking: Kill Bacteria, Coagulation, Change of colour, White and yolk set

Uses: Emulsifying agent, Enriching, Glazing, Binding, Hot/Cold

Labelling

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Brain Droplets (Wisdom Pearls)

Ideas

This can be used for thought showering in any context or for generation of ideas — for essays, exam questions, compositions in any subject.

Teachers frequently seek ideas when introducing a new topic. Usually this is done in a whole class context. When pupils thought shower in small groups using an organiser to give focus to the work, the quality and quantity of ideas increase significantly.

The dynamic of the small group means that everyone is motivated to contribute to the group goal. It feels safer to contribute ideas in a small group rather than in front of the whole class. Ideas may be shared with other groups so the entire class benefits from all ideas generated.
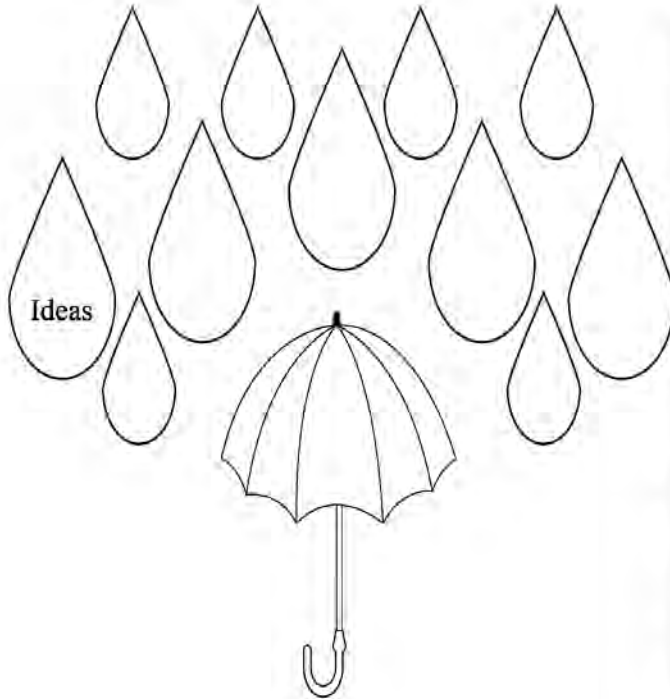
Suggestions from teachers

Gaeilge
- Foclóir a bhailiú.
- Tuairimí a bhailiú d'aiste.
- Tuairimí a lorg faoi ghné ar bith den litríocht.

English
- Brainstorming ideas for compositions
- Pre-teaching – drawing out ideas at start of a topic
- Poetic terminology

Music
- Listening to set work
- Essay on traditional Irish Dance
- Characteristics of musical eras

Religion
- Signs and symbols
- Kingdom of God
- Moral Issues
- Christianity

Mathematics/Business
- Complex numbers
- Line geometry
- Functions of a bank

History
- Stalins Domestic Policy
- Renaissance – main points and characters
- Introduction to any topic
- Civil War

Geography
- Pollution
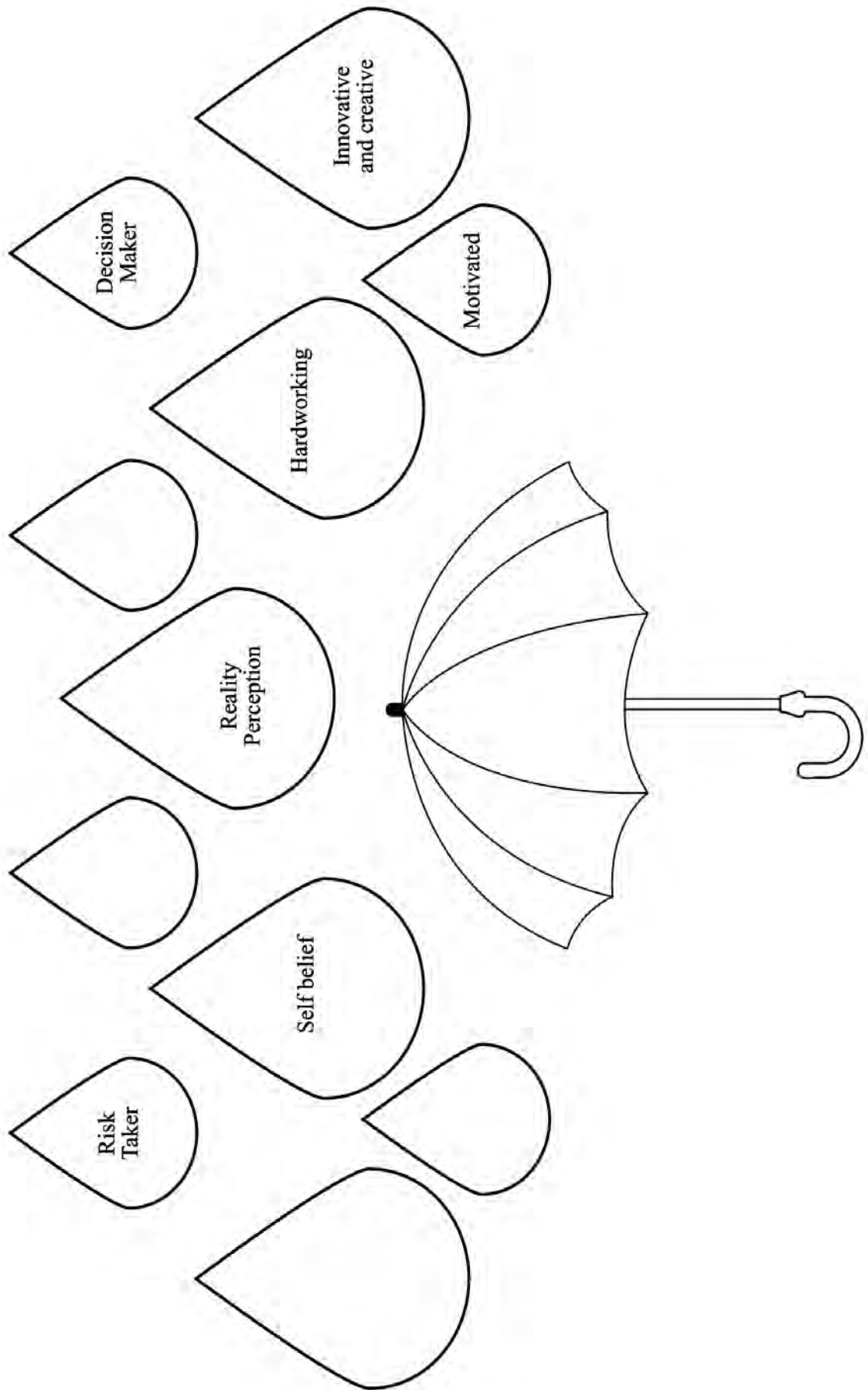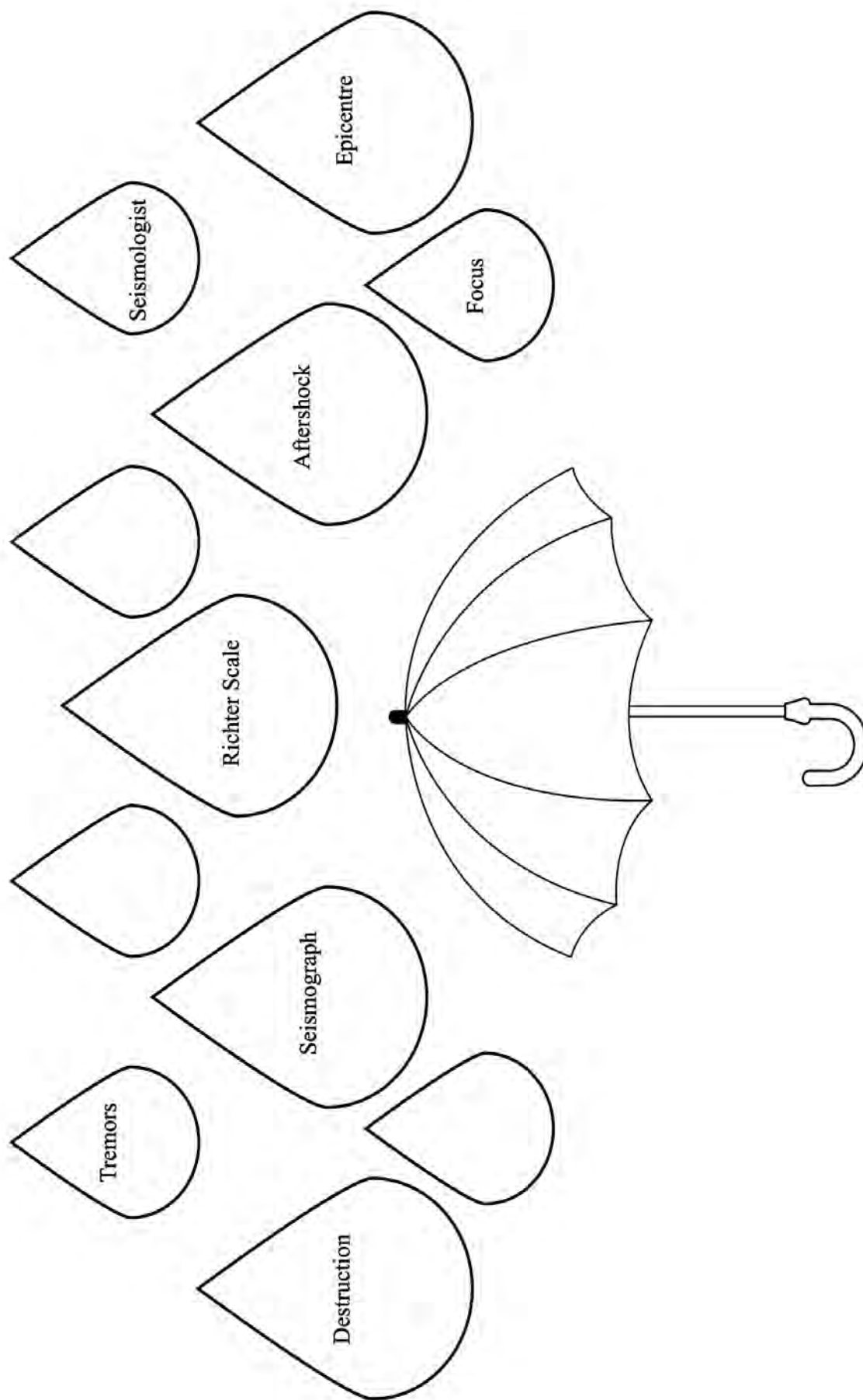- Core Regions
- Earthquakes
- Weathering

Science
- Human hormones
- Using the microscope
- Learning light
- Human defence system

Characteristics of an Entrepreneur

Innovative and creative

Decision Maker

Motivated

Hardworking

Reality Perception

Self belief

Risk Taker

Earthquakes

Epicentre

Seismologist

Focus

Aftershock

Richter Scale

Seismograph

Tremors

Destruction

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Cross Classification Chart

Criteria / Topic					

When condensing and organising comparative data according to various criteria, this chart helps. The data is gathered together in a coherent form. The chart provides a structure in which to build the information.

It can be used to summarise information in an easy to remember way and has a wide variety of applications in language, science, technology, social and business subjects.

Students build up the information. Criteria are provided by the teacher and placed across the top of the chart. Students may be encouraged to contribute relevant criteria themselves.

This organiser provides an excellent revision tool and a framework for study.

Suggestions from teachers

Gaeilge
- Comparáid a dhéanamh idir na dánta atá á ndéanamh don T.S. faoi cheannteidil éagsúla.
- Comparáid ar bith

History/RE
- Stages in development of modern Ireland
- World Religions

Home Economics/ Mathematics
- Food additives
- Cooking methods
- Milk
- Line, circle, trigonometry, transformations
- Cone, cylinder, hemisphere, sphere

Art/English
- Early Irish Artifacts
- Paintings
- Art in various ages
- Poets/poems
- Themes/concepts

Geography
- Regions
- Growing crops
- Various climates

Business
- Business Ownership
- Production Methods
- Sources of Finance
- Methods of Communication
- Forms of Transport

Music
- Set Works for L. Cert
- Set and choice songs

Technical Subjects/ Science
- Woods: types of finishes
- Insulation locations
- Soil types and crop growth

Manufacturerd Boards

Board	Raw Material	Characteristics	Uses	Thickness
Plywood	Hardwood and softwood veneers.	Grain visible. Available in large sheets. Strong	External plywood available for Boats and flat roofs. Furniture, walls and ceilings. Thin plywood needs to be framed.	3mm to 25mm
Strip-core board	Strips of wood and veneers	Grain visible. Available in large sheets. Strong. Does not warp or split.	Furniture panels, doors. Framing not necessary	12mm to 25mm
Chipboard	Wood chips and sawdust	No grain unless veneered. Available in large sheets. Easy to decorate.	Furniture manufacture, wall panels, edges require covering. Framing not necessary	9mm to 25mm
Hardboard	Wood chips which have been reduced to a pulp	No grain unless veneered. Does not split. Available in large sheets. Hard, Durable, Tough. Can be painted	Furniture backs, drawer bottoms, partitions and ceilings. Framing necessary	3mm to 9m
Veneers	Thin sheets of wood	Distinct wood grain. Very thin. Weak until bonded to a base	Ornamental surfaces for artificial boards or solid wood. Marquetry	1mm

Early Irish Metalwork Artifacts

Criteria / Era	Shape	Function	Nature of Decoration	Methods of Decoration	Materials Used
Bronze Age 2000 -500BC	Sun Disc	Decorative badge or button	Abstract Geometric	Incision Repousse	Mostly flattened gold
Iron Age 500BC – 500AD	Petrie Crown	Decorative horse trapping	Semi Abstract Organic Based on plant imagery	Incision and Repousse	Bronze
Early Christian 500AD – C7th	Tara Brooch	Pseudo pennicular Brooch	Celtic fret work Gold filigree Enamelling	Incision Repousse Gold filigree Enamelling Soldering Gold	Silver Enamelling
Late Christian C7th – C12th	St Patrick's Bell Shrine	House St Patrick's Bell	Celtic fret work Gold filigree Enamelling	Incision Engraving Repousse Gold filigree Enamelling Soldering	Gold Silver Enamelling

PDST

Double Venn Diagram
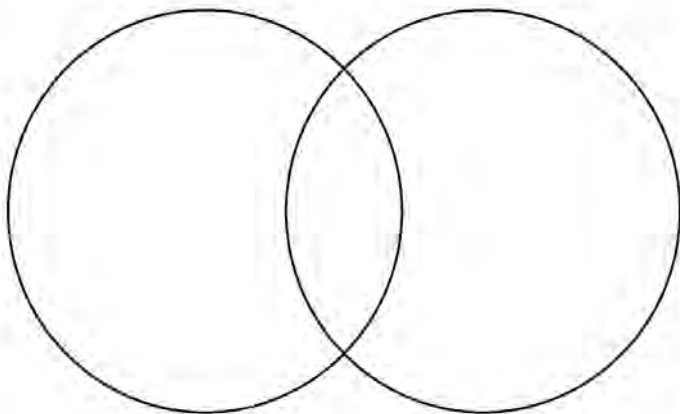
The double Venn is a simple and highly effective model for examining the similarities and differences between two items. Students work in small groups to compare and contrast. One student records the agreed information in the organiser on behalf of the group.

Students of all abilities and learning styles can work together and contribute according to their interest, learning style and ability. No student is held back and the class does not move too fast for any student.

Students are actively involved in the learning. They learn to agree, disagree, listen, explain and help each other. They orally process the learning. These soft skills need to be encouraged and actively taught in the classroom.

Suggestions from teachers

English
- Two poems
- Relationships in texts
- Essay planning
- Tabloids/Broadsheets
- Capulets/Montagues

Gaeilge
- Comparáid idir dhánta/scéalta./charachtéir
- Comparáid idir téamaí e.g. An saol mar atá is mar a bhí
- *Faoiseamh a Gheobhadsa* Comparáid idir saol na tuaithe agus saol na cathrach
- Accusative/Dative case

Religion/Mathematics
- Two religions e.g. Judaism and Christianity
- Decimals (percentages) Fractions

Home Economics
- Comparing ovens
- Mould reproduction
- Accommodation
- Nuclear/extended family
- Commercial/Homemade food

Music/Art
- Baroque music vs. art
- (Hallelujah vs. St George and the Dragon)
- Set vs. Choice songs
- Musical eras
- Romanesque/Gothic

Technical Subjects
- Metals and alloys
- Ferrous/Non-ferrous metals
- Hard/Soft woods

History/Geography
- Luther and Calvin
- Munster and Leinster Plantations
- Italian renaissance artists
- War of Independence/ Civil War
- Mesolithic/Neolithic ages
- Photograph/OS Map

Science
- RNA v DNA
- O2 v CO2
- Photosynthesis v respiration
- Plant cell v animal cell
- Male v female endocrine system
- Mitosis v meiosis
- Endocrine v nervous control
- Circulatory/Lymphatic system

Preparing an essay on holidays

Verbs are common to both holidays - nouns are different for each

Summer

Nouns

Verbs

Nouns

Winter

PDST

Vein and Artery

Artery

- away from heart
- thick muscle
- narrow lumen
- pulse blood under pressure
- oxygenated except for pulmonary

Vein

- towards heart
- less muscular
- wider lumen
- less pressure – valves present
- de-oxygenated except for pulmonary

(Overlap)

- carry blood in lumen
- cylindrical shape
- muscle layer
- elastic layer
- lining epithelium

PDST
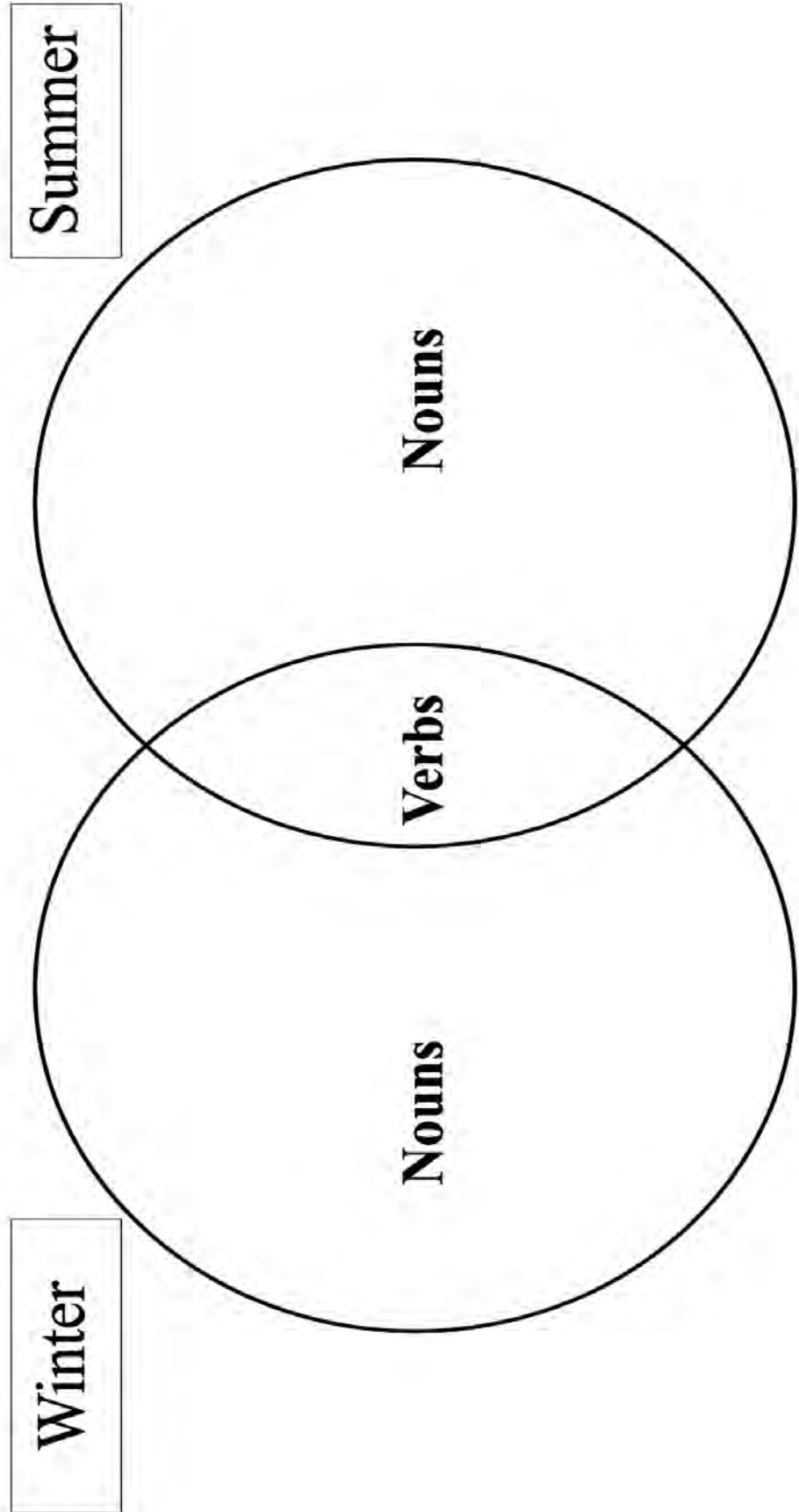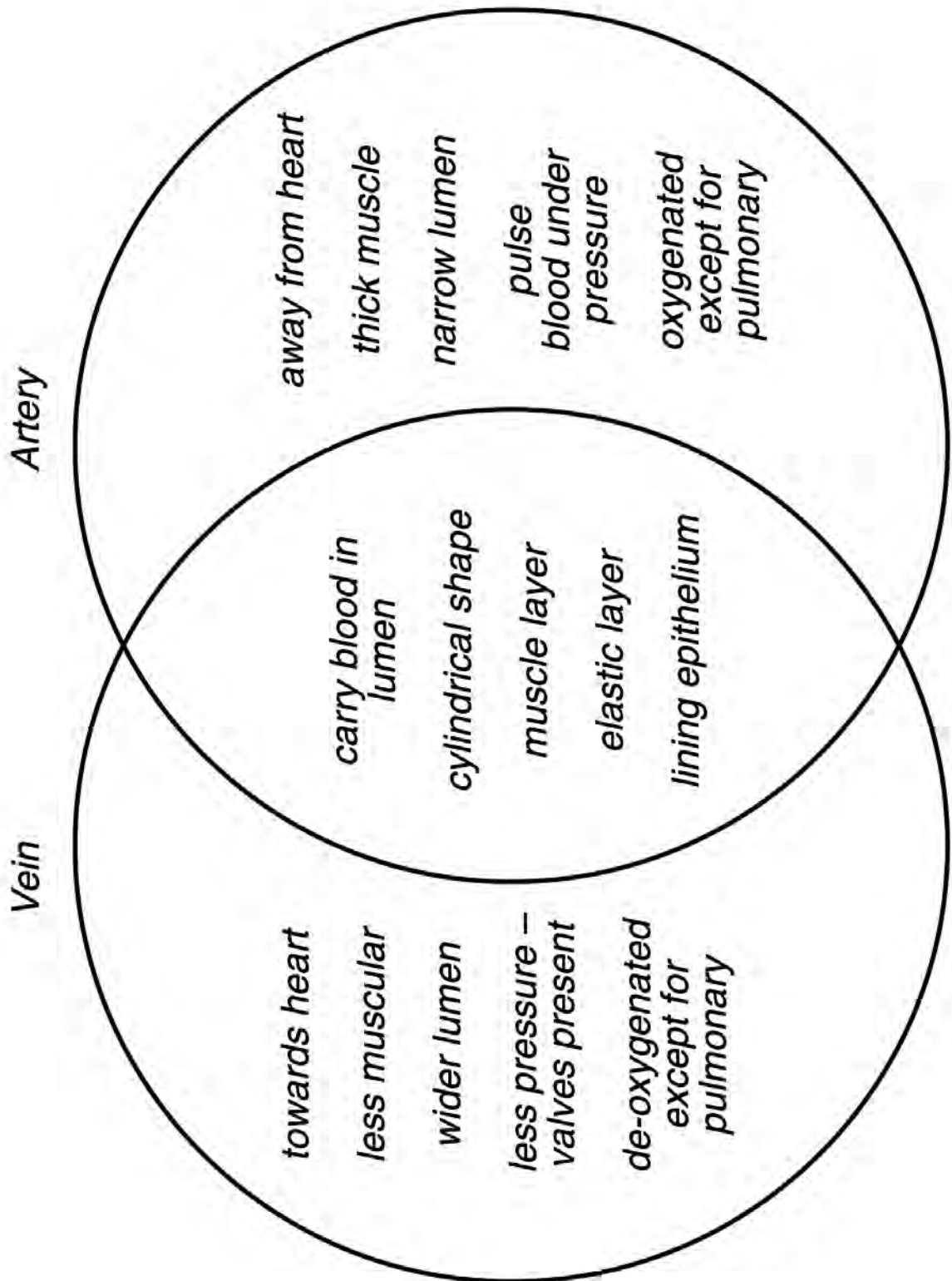
Triple Venn Diagram
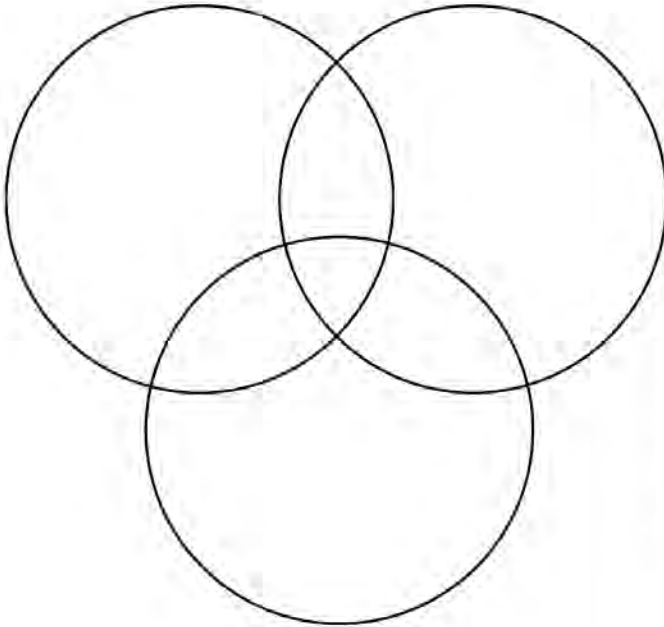
This is a very powerful tool for answering higher level questions that require three items (books, texts, characters, regions, phenomena) to be compared and contrasted.

Exam questions prepared in class as a group can be attempted alone for homework.

The purpose of the team is to build stronger individuals — "What we can do together today we can do alone tomorrow".

Formative assessment is facilitated as students can clearly see how much they know about a topic by the time they have finished the work. It may be used to develop the ability - 'attack skills' - to tackle questions that students find challenging.

Suggestions from teachers

English
- The comparative question (comparing three texts) for higher level Leaving Certificate
- Main concerns of a body of a poet's work (Higher Level)

Religion/Maths
- Main religions
- Forms of Christianity
- Volume of cone, cylinder, sphere

Home Economics
- Food types
- Effects of alcohol abuse
- Compare dairy, meat and vegetable
- Compare protein, fats, carbohydrates
- Special diets
- Effects of unemployment on family, society, individual

Technical Subjects
- Technical drawing - types of projections / views
- Joining different materials
- Types of energy
- Wood, plastic, metal

History
- Three leaders e.g. Hitler, Stalin & Mussolini

Art/Music
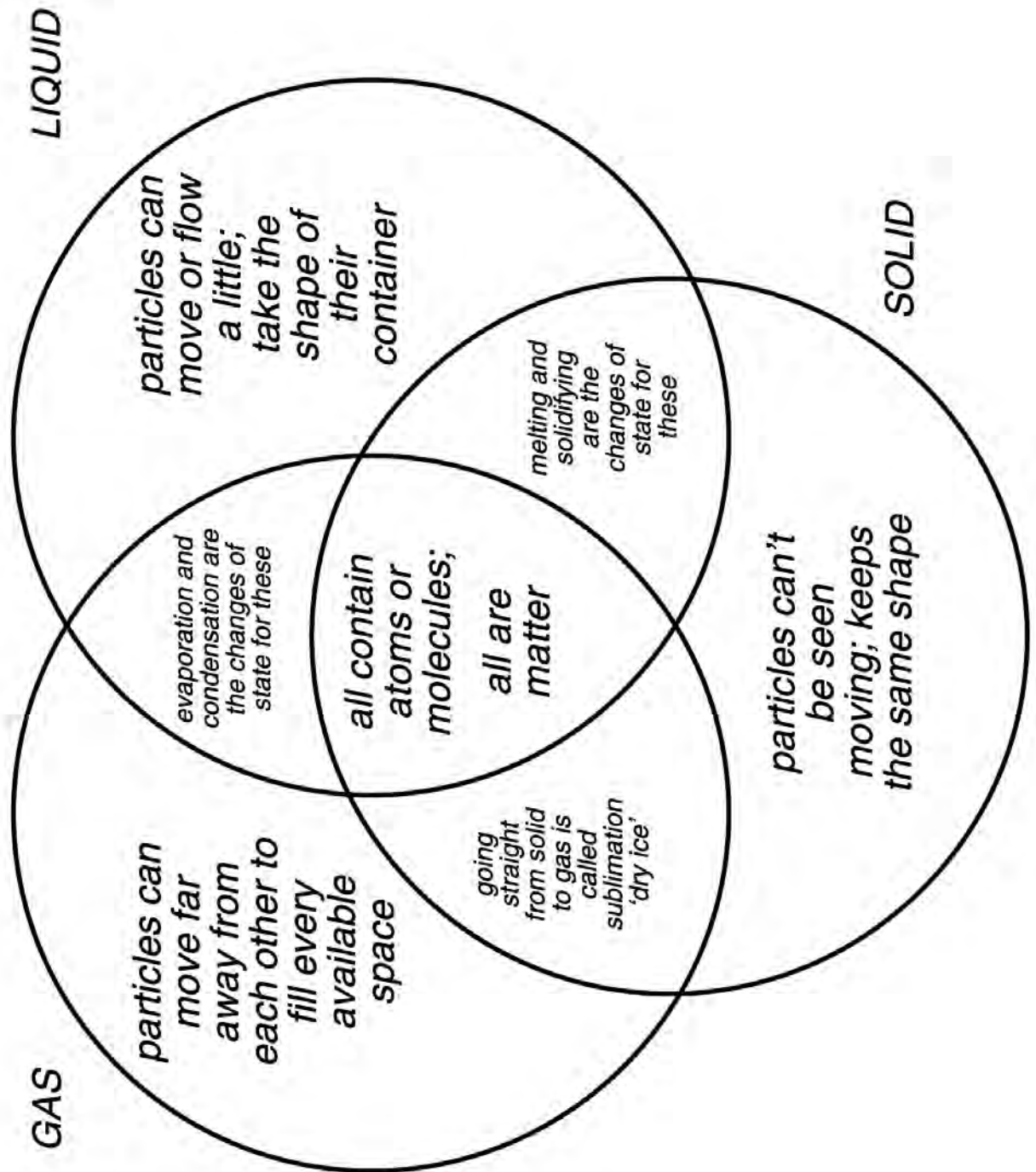- Colour Mixing
- Comparing songs in general study

Science
- Organs of excretion
- 1st year science pre-learning
- Compare protons, electrons, neutrons
- Conduction, convection and radiation
- Water in physics, chemistry, biology

Gaeilge/Modern Language
- Comparáid idir scéalta/danta/carachtéir.
- Past, present, future tense

PDST

Solids, Liquids, Gases

LIQUID

SOLID

GAS

particles can move or flow a little; take the shape of their container

melting and solidifying are the changes of state for these

evaporation and condensation are the changes of state for these

all contain atoms or molecules; all are matter

particles can't be seen moving; keeps the same shape

particles can move far away from each other to fill every available space

going straight from solid to gas is called sublimation 'dry ice'

PDST

Comparative Question

Of Mice and Men

Silas Mariner

Juno and the Paycock

Race
Bullying
American Setting
Unsettled Nomadic Life
Depression

Realism
Escape from reality
Working Class Life
Violence
Alcohol

Rural Life
Isolation

Working People
Poverty
Violence
Tragedy

Urban Life
Civil War
Irish Setting
Nationalism

Fairy tale story
A lot of unlikely coincidences
English Setting
Remote society
Superstition

Desire for wealth (will and gold)
Role of women
Betrayal

PDST

Four Corner Organiser

When characteristics of four related concepts/topics/people are being explored, the four are placed in the centre of the organiser and two criteria are placed on the outside.

Examples of criteria are route and accomplishments of explorers, rights and responsibilities of stakeholders, formulae for and examples of how to solve equations, sources and uses of vitamins, examples and evidence for physics laws, characteristics and actions of characters.

This is a very powerful tool when used by small groups to actively construct and organise knowledge. It promotes higher level thinking.

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Suggestions from teachers

Maths
- Factorising
- Differentiation by rule
- Coordinate geometry of the line
- Area and Volume
- Numbers
- Number sets

Science
- Trends in the periodic table
- Genetics
- History of the atom
- Food tests
- Le Chatelier's principle
- Separation techniques
- Four physics laws — examples and evidence
- Blood composition

Home Economics
- Nutrients
- Food constituents
- Food types

Art
- Analysing a painting
- Art Movements

Geography
- Erosion/Deposition (2 corner organiser)

Music
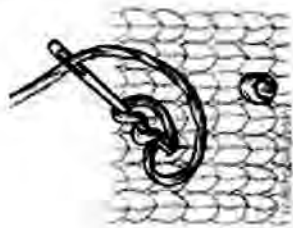- Periods - Composers - Works
- Irish Dances

Business
- Community Development Partners
- Stakeholders in Business
- Financial Institutions
- Marketing Mix
- Statistics Charts

Technical Subjects
- Production of steel from Iron Ore

Embroidery Stitches

Use
to form an
outline

Use
to form a border or
fill in an area i.e.
centre of a flower

Use
for
hand-stitched
flowers

Use
to
fill in
an area
outline

Stem
Stitch

Lazy
Daisy

French
Knots

Satin
Stitch

Equations

Quadratic Equation

Cubic Equation

Linear Equation

Simultaneous Equation

Example

Example

Example

Example

*How to solve it -
Describe the process*

*How to solve it -
Describe the process*

*How to solve it -
Describe the process*

*How to solve it -
Describe the process*

Tri Pie

Pro   Con

Grey Area
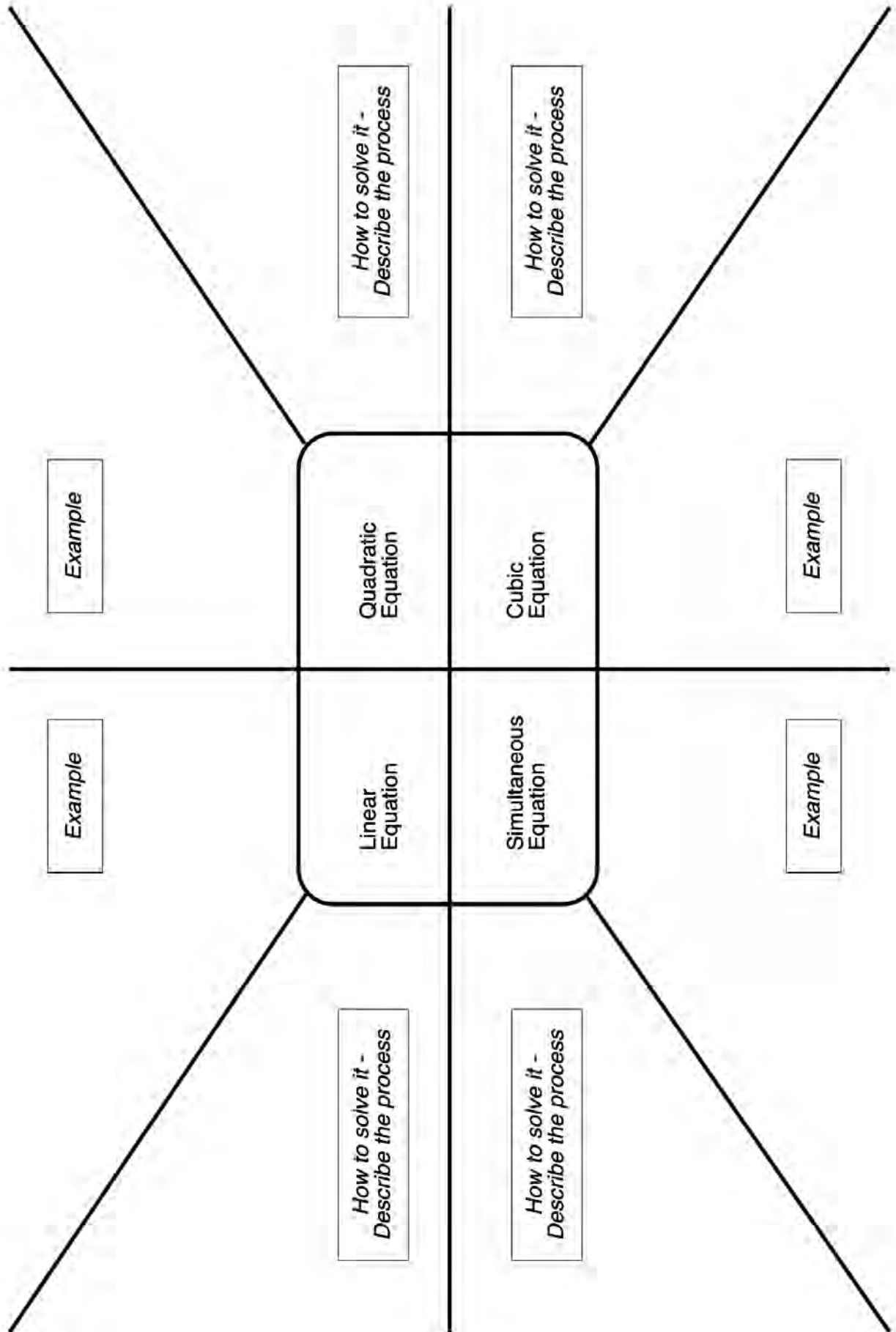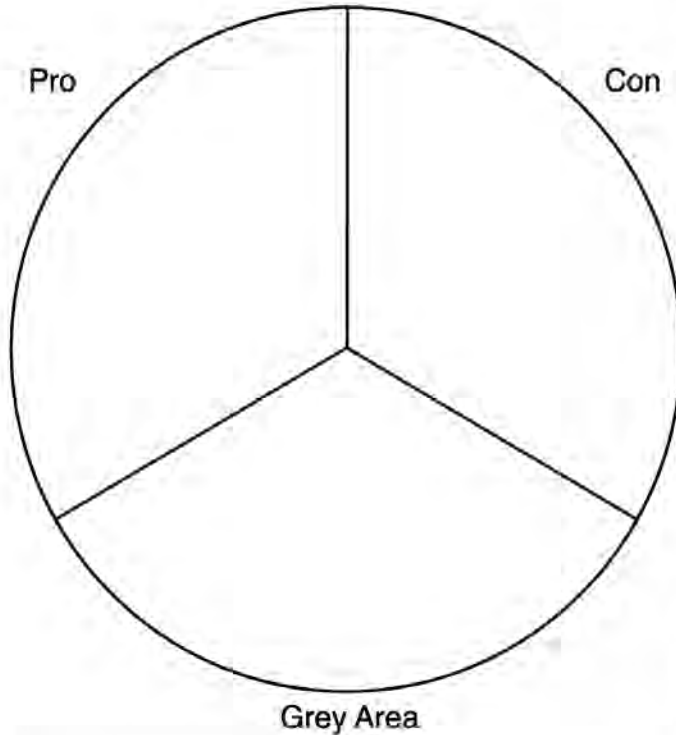
This organiser is suitable for Leaving Certificate higher level questions/topics. It requires very high level thinking to hold two opposing viewpoints in one's mind at the same time. To hold two opposing viewpoints <u>and</u> consider areas of uncertainty requires particularly high levels of maturity in thinking.

Students sometimes tend to be black or white in their views and indeed often only see one point of view.

This model helps students expand their thinking to examine all aspects of a problem / issue. Students are required to place some information in each section.

Small groups are particularly effective in providing the breadth of viewpoints needed to give high quality answers in this context.

Suggestions from teachers

Gaeilge
- Diospóireacht a ullmhú.
- Tuairimí a bhailiú faoi théama/carachtar i scéal

English
- Debate style compositions
- Discuss a statement on a literary text/or a character
- Advantages/ disadvantages type questions

Science
- Should all cars run on biofuel?
- Should genetic engineering be banned?

Technical Subjects
- CNC Lathe Machine

Religion
- Moral Dilemmas

History
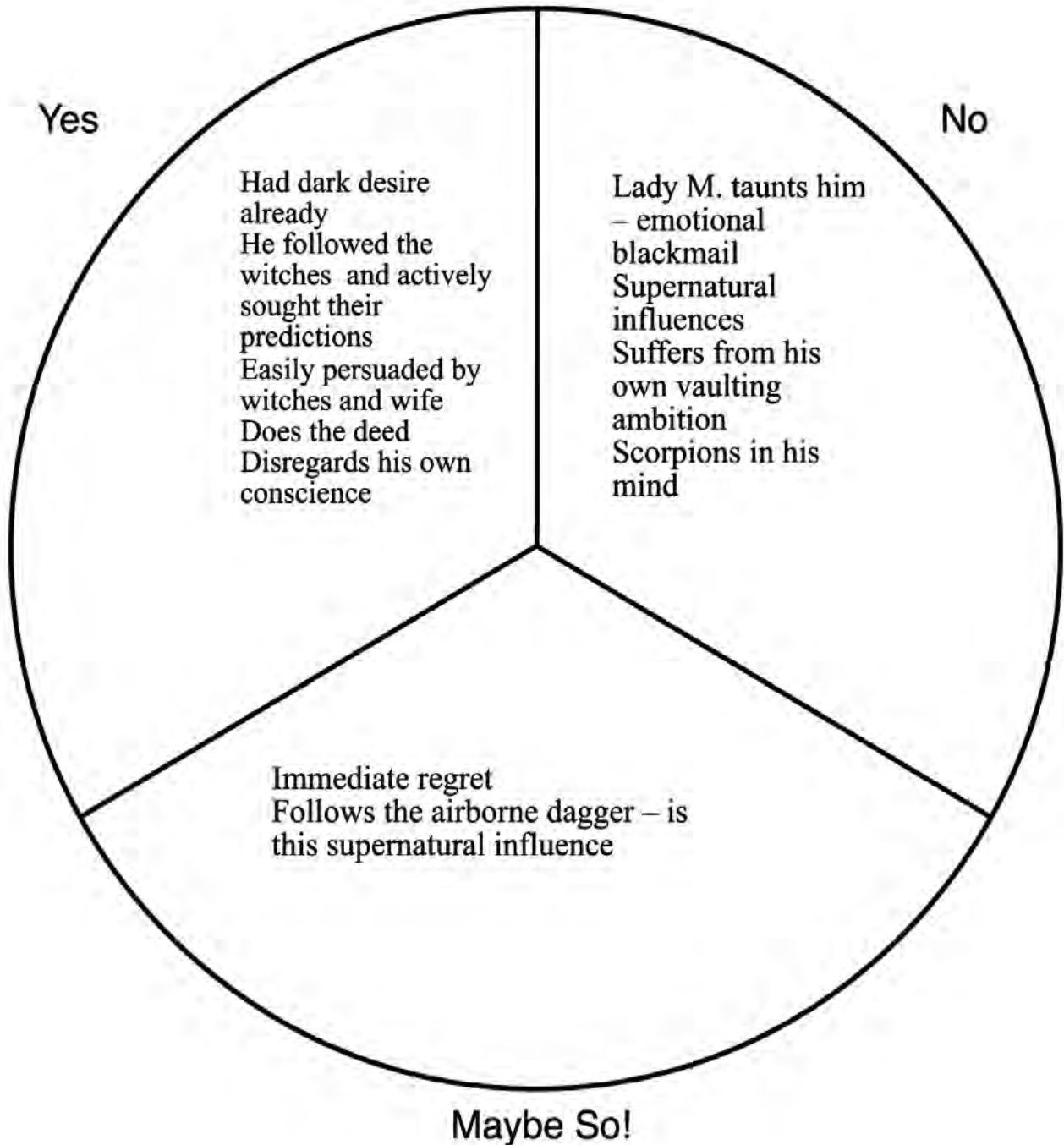- Was the ratification of the Anglo-Irish Treaty the only cause of the Irish Civil War?

Business
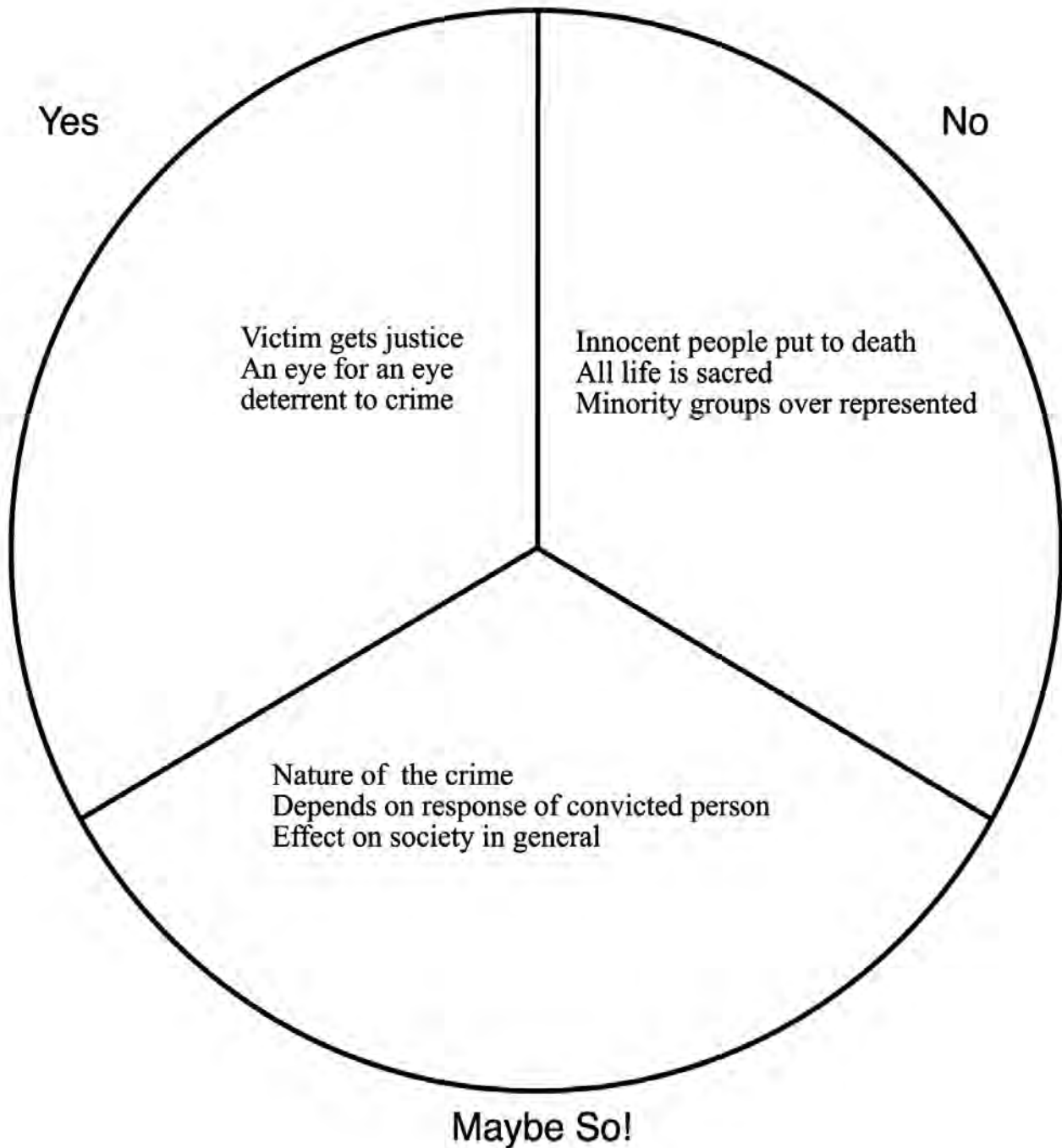- Social and Ethical responsibilities of a business

Geography
- Planning issues

Is Macbeth responsible for Duncan's death?

Yes

No

Had dark desire already
He followed the witches and actively sought their predictions
Easily persuaded by witches and wife
Does the deed
Disregards his own conscience

Lady M. taunts him – emotional blackmail
Supernatural influences
Suffers from his own vaulting ambition
Scorpions in his mind

Immediate regret
Follows the airborne dagger – is this supernatural influence

Maybe So!

PDST

Should the death penalty be imposed?

Yes

No

Victim gets justice
An eye for an eye
deterrent to crime

Innocent people put to death
All life is sacred
Minority groups over represented

Nature of the crime
Depends on response of convicted person
Effect on society in general

Maybe So!

Starburst *(all points covered)*
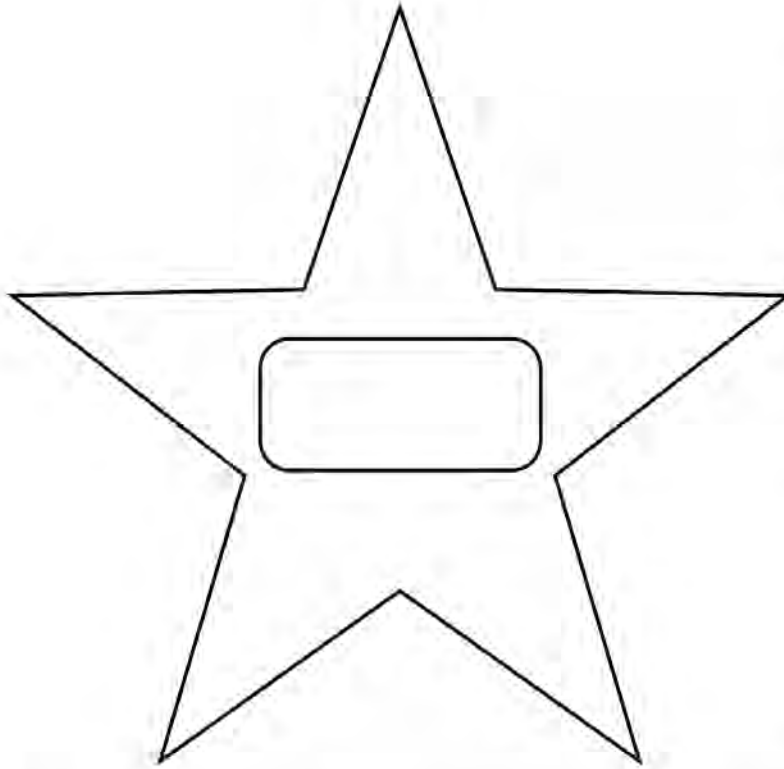
Many examination questions require 5 points in the answer. This organiser helps the visual learner to remember the points more easily. Agreeing the points in a small group aids long term memory retention.

Note to teachers:-
Approximately 10 to 15% of students prefer to learn from lists of notes in text form and they can memorise text more easily.

Suggestions for use in some subjects

Gaeilge/Modern Language
- Céimeanna i scríobh litreach/nóta.
- Achoimre ar dhán e.g. téama, mothúcháin, íomhanna etc
- Learning vocabulary associated with a topic

Maths
- Order of operations
- Coordinate geometry of Line
- Solving equations (JC, OL)

Business
- Principles of insurance
- Forming a company
- TQM
- Marketing Mix
- Elements of Business Letter
- Sale of Goods and Supply of Services Act 1980
- Budgeting
- Sole trader

Science
- Particle physics
- Bacteria
- Periodic table
- Light
- Ag. Science—coniferous trees

Music
- Characteristics of Irish Music
- Sean Nós Singing
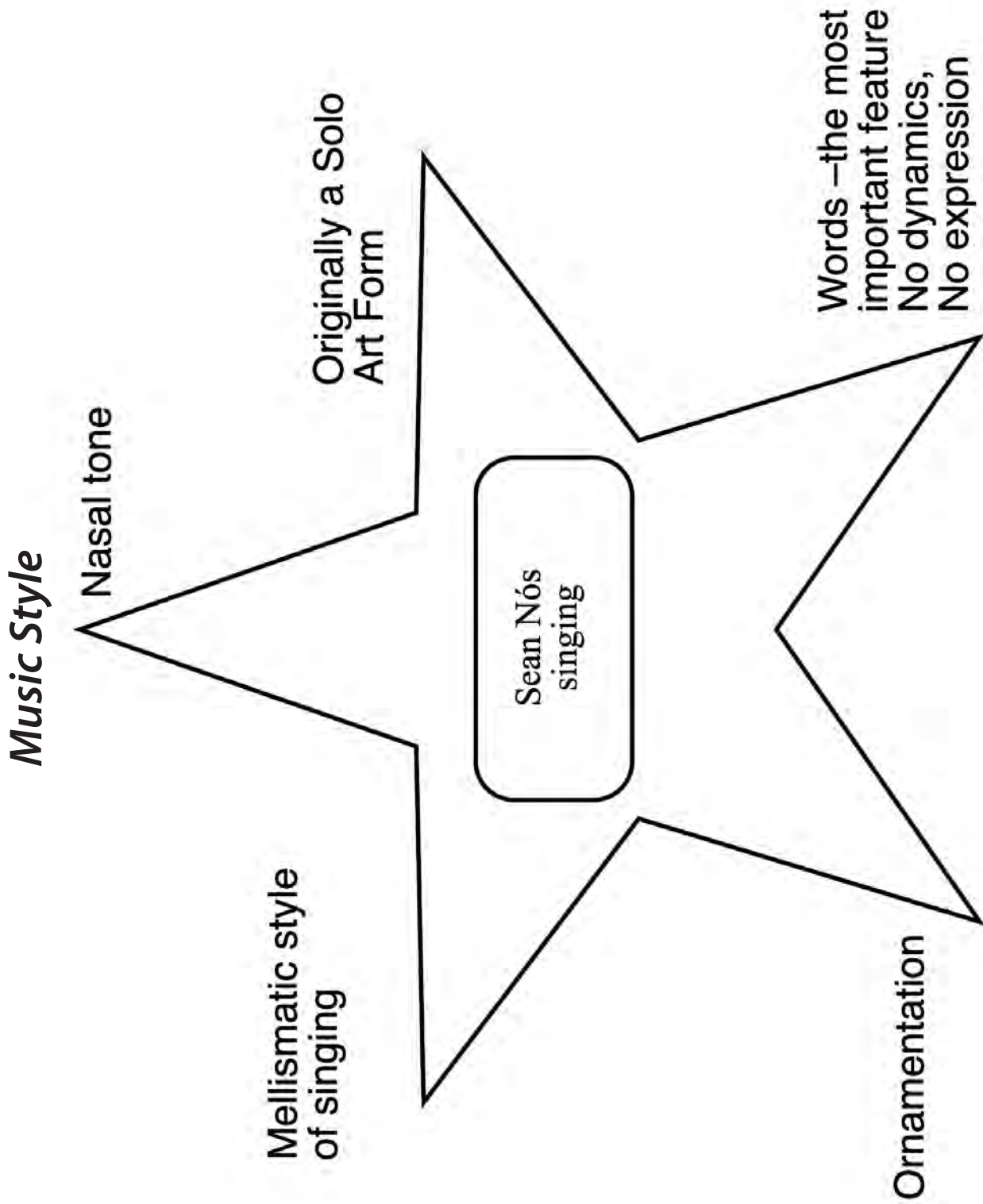- Leaving Certificate set works

Home Economics
- Food types
- Cheese
- Energy requirements

History
- Parnell and the Land League
- Any key person in history

Art/English
- Impressionism
- Modern periods
- Aspects of a character
- Aspects of poems

Music Style

Nasal tone

Originally a Solo Art Form

Words – the most important feature
No dynamics,
No expression

Sean Nós singing

Mellismatic style of singing

Ornamentation

Nóta a Scríobh

Cathain?

a bheidh sé ar siúl?
a rachaidh tú ann?
a bhuailfidh sibh le chéile?
a thosóidh sé?

Céard?

a chonaic tú?
a léigh tú?
a bhí ann?

Cád?

a dhéanfaidh tú?
a cheannóidh tú?
a fheicfidh tú?
a íosfaidh tú?

Cá?

mbeidh sé a siúl?
mbuailifidh sibh le chéile?

Ábhar

Conas?

a rachaidh tú ann?
a thiocfaidh tú abhaile?

Cé?

a bheidh ann?
a fheicfidh tú?

Research Grid

Q1	Q2
Answer	Answer
Q3	Q4
Answer	Answer
Q5	Q6
Answer	Answer

This is a question and answer learning methodology. It is particularly suitable for independent learning in small groups. Questions are written by the teacher and students research the answers and write them in.

Students take responsibility for their own learning. They can consult within the group to reach the best answer to a particular question. They help each other to build high quality answers.

A wide variety of topics in many subject areas can be taught using this method.

One organiser is shared by a small group. Students can fill their own organiser for homework and keep it for study and revision.

Suggestions from teachers

Gaeilge
- Suibhé ranga a dhéanamh.
- Ceisteanna a thabhairt ar mhír scannáin/ alt léamhthuisceana

Modern Language
- Se Présenter

English
- Analysing a poem
- Recapping a text

History
- Northern Ireland 1920-49
- Themes of the Holocaust

Science/Maths
- Functions of skeleton
- Plant reproduction
- Stages in solving LC HL problems

Home Economics
- Marriage

Business
- Marketing
- EU Institutions
- Legislation

Music
- Cadances
- Works/songs
- Key signatures
- Notation
- Irish music
- Aural skills

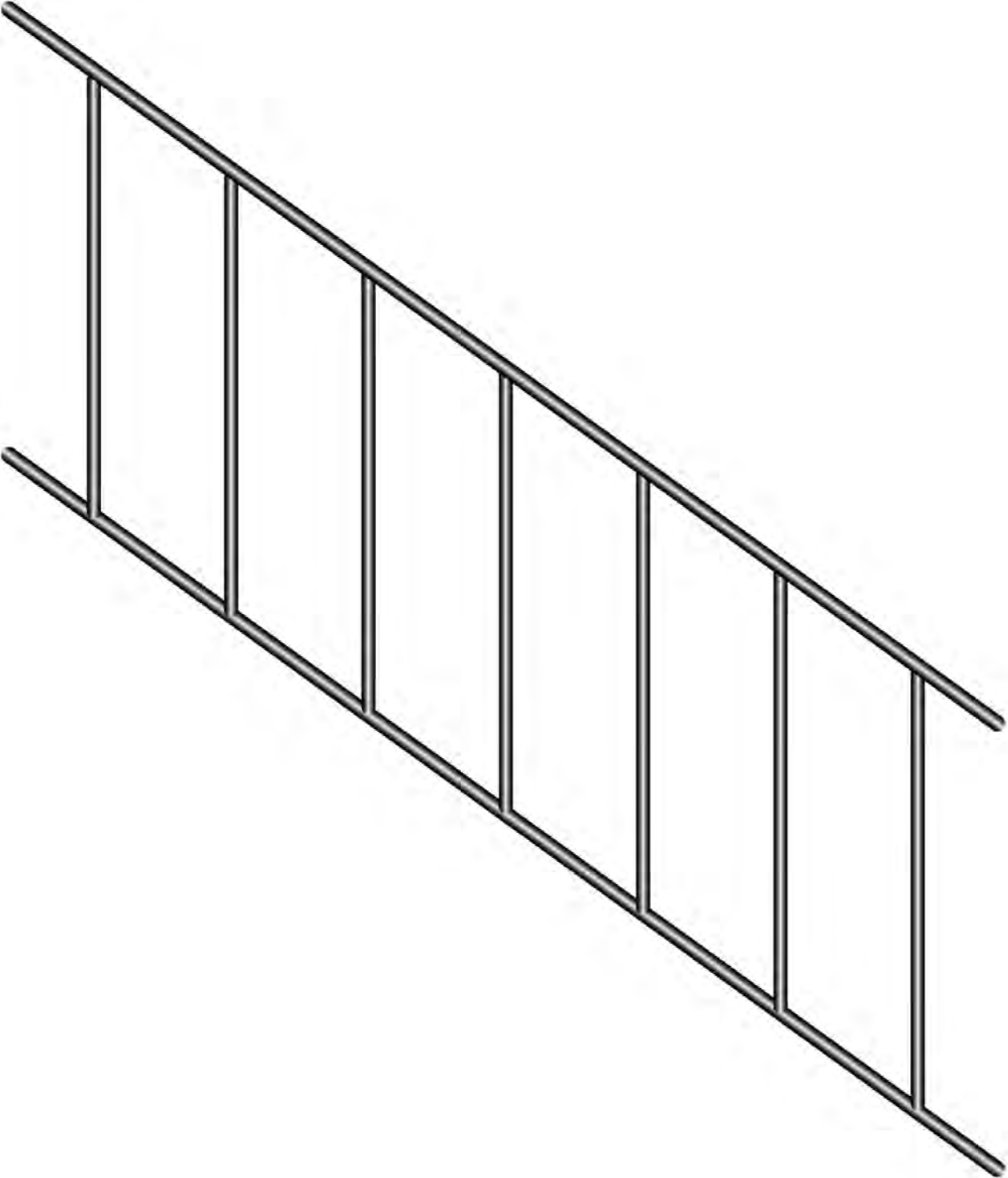# Character Analysis: – Write brief informative notes on the following

Describe the character's physical appearance	Describe the character's background	Describe the setting in which the character lives	The way the character behaves

The way the character speaks	Why I would/would not like to be the character	What motivates the character	What others say about the character

How others behave around the character	Important relationships for the character	The playwright's depiction of the character	The playwright's style of characterisation

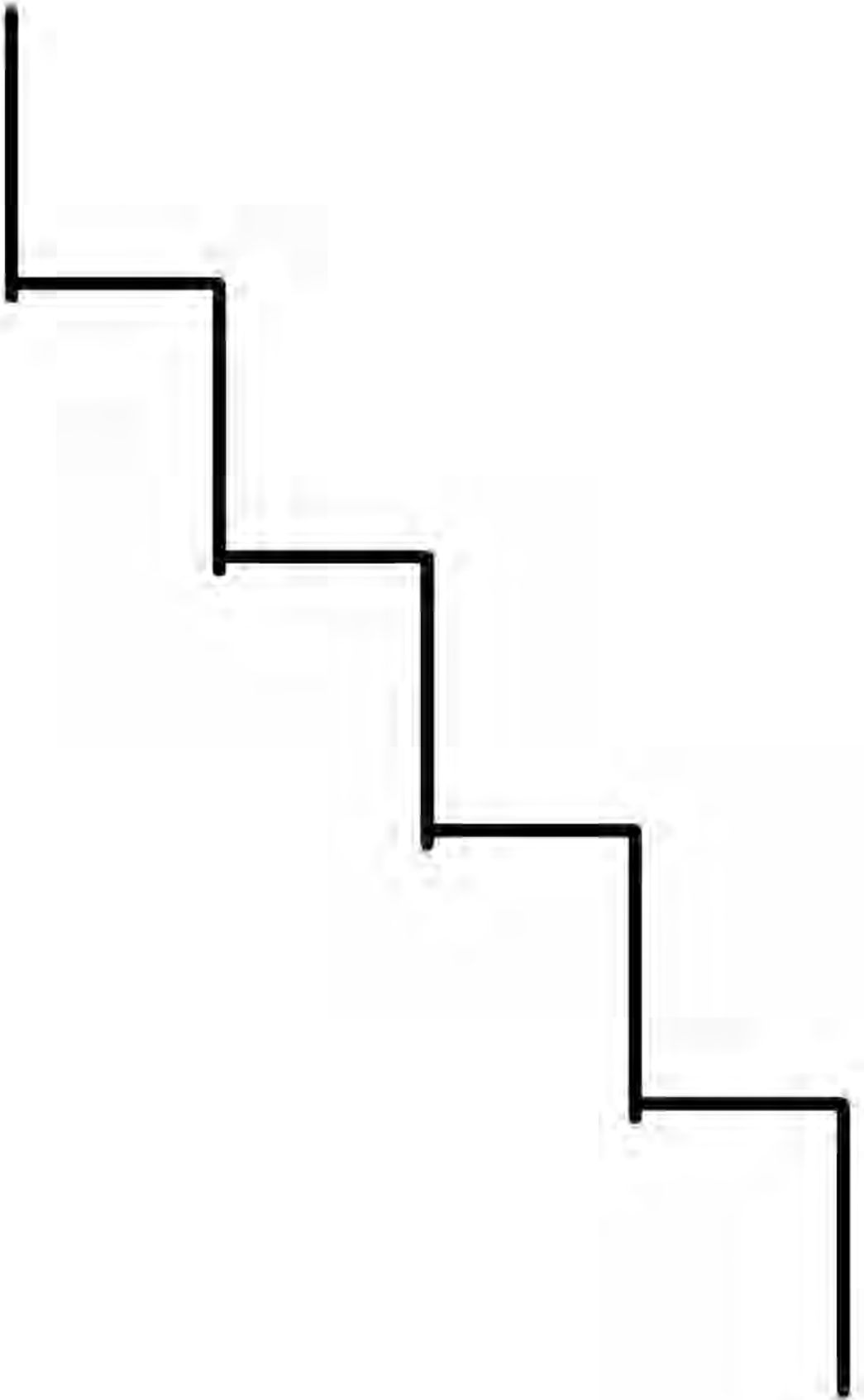# Investigating a Third Level Course

When can I apply?	Closing Date?	What subjects needed?
Answer	Answer	Answer

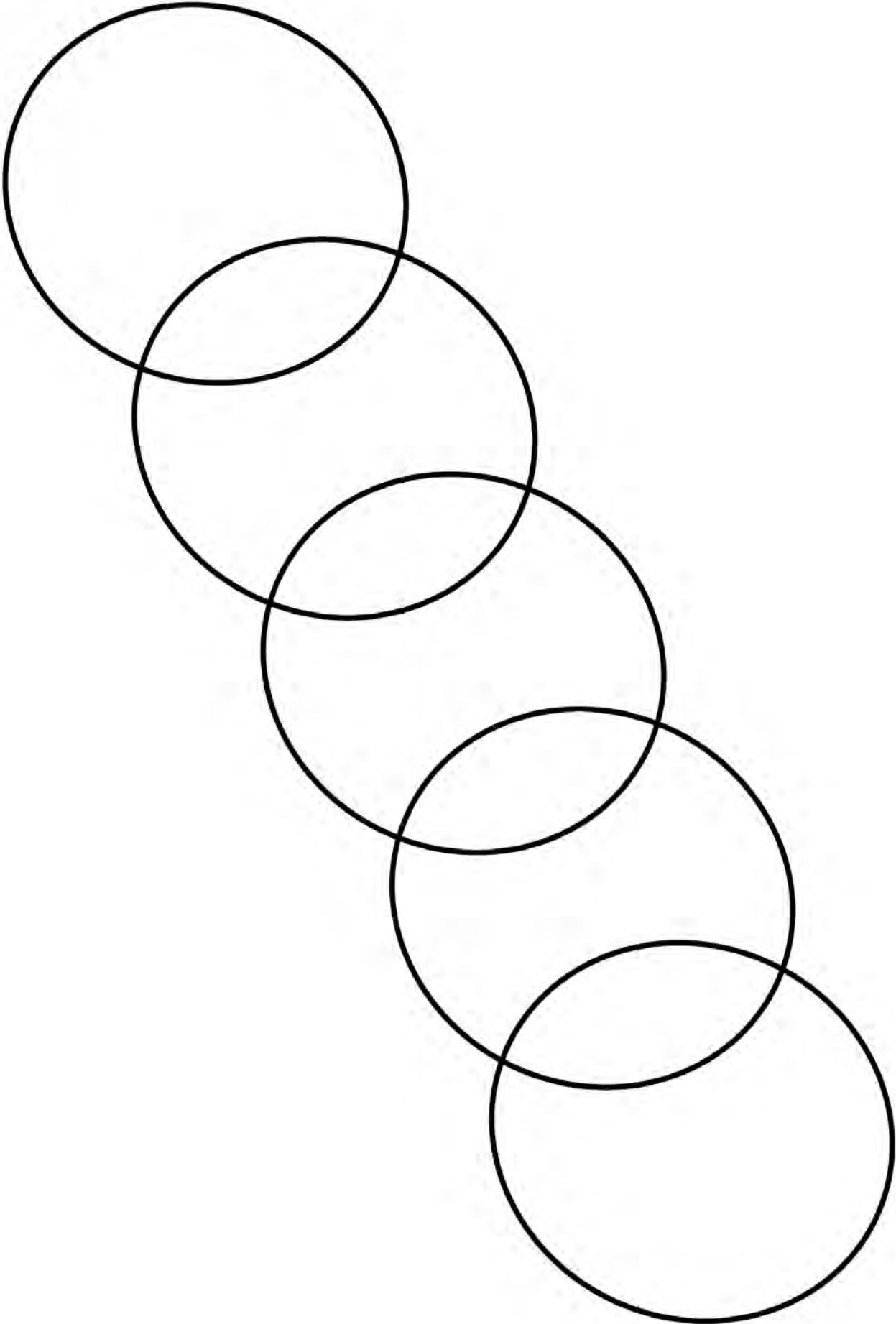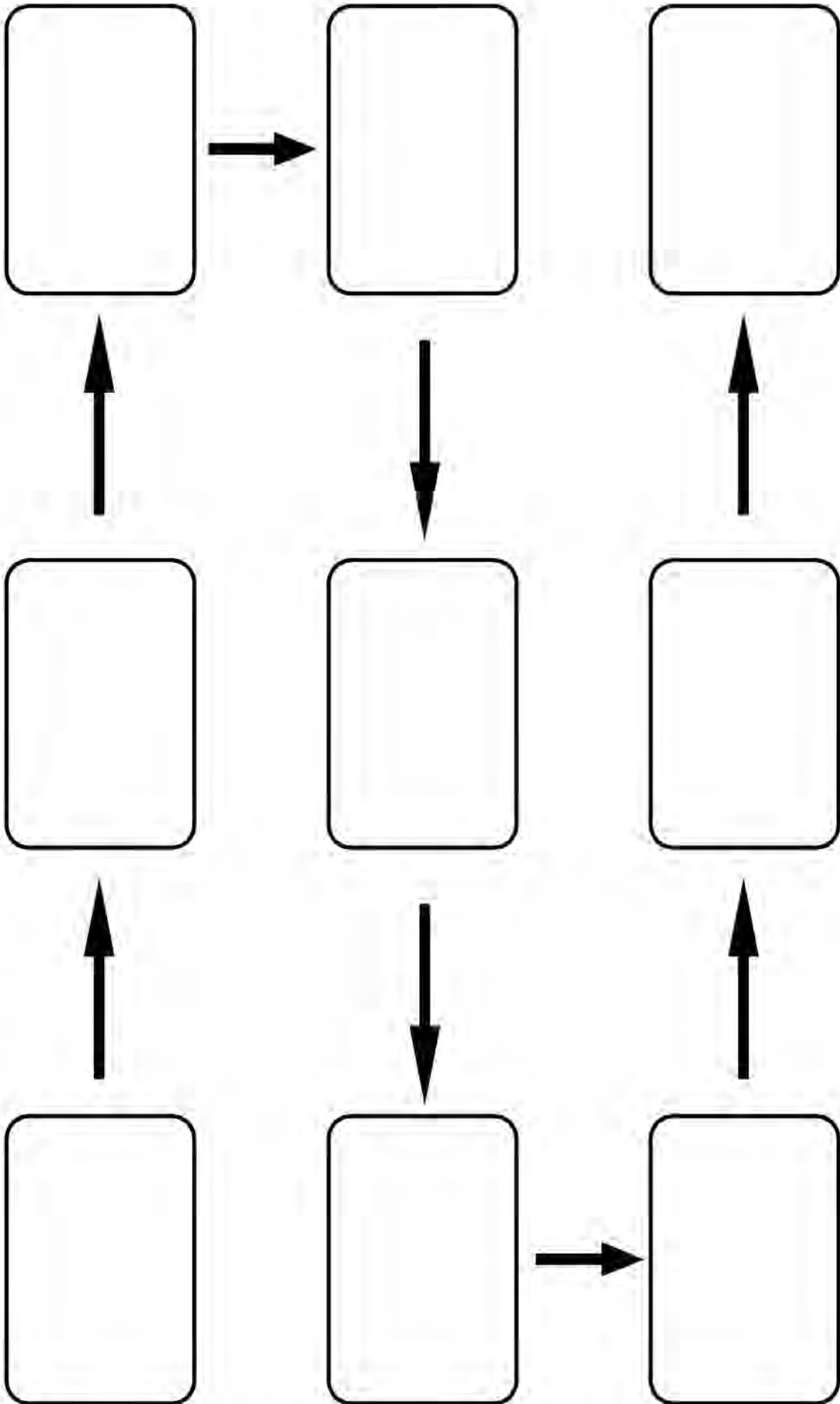| Entry Requirement?	What does course involve?	What alternative courses?
Answer	Answer	Answer

Section 2

Graphic Organiser Templates
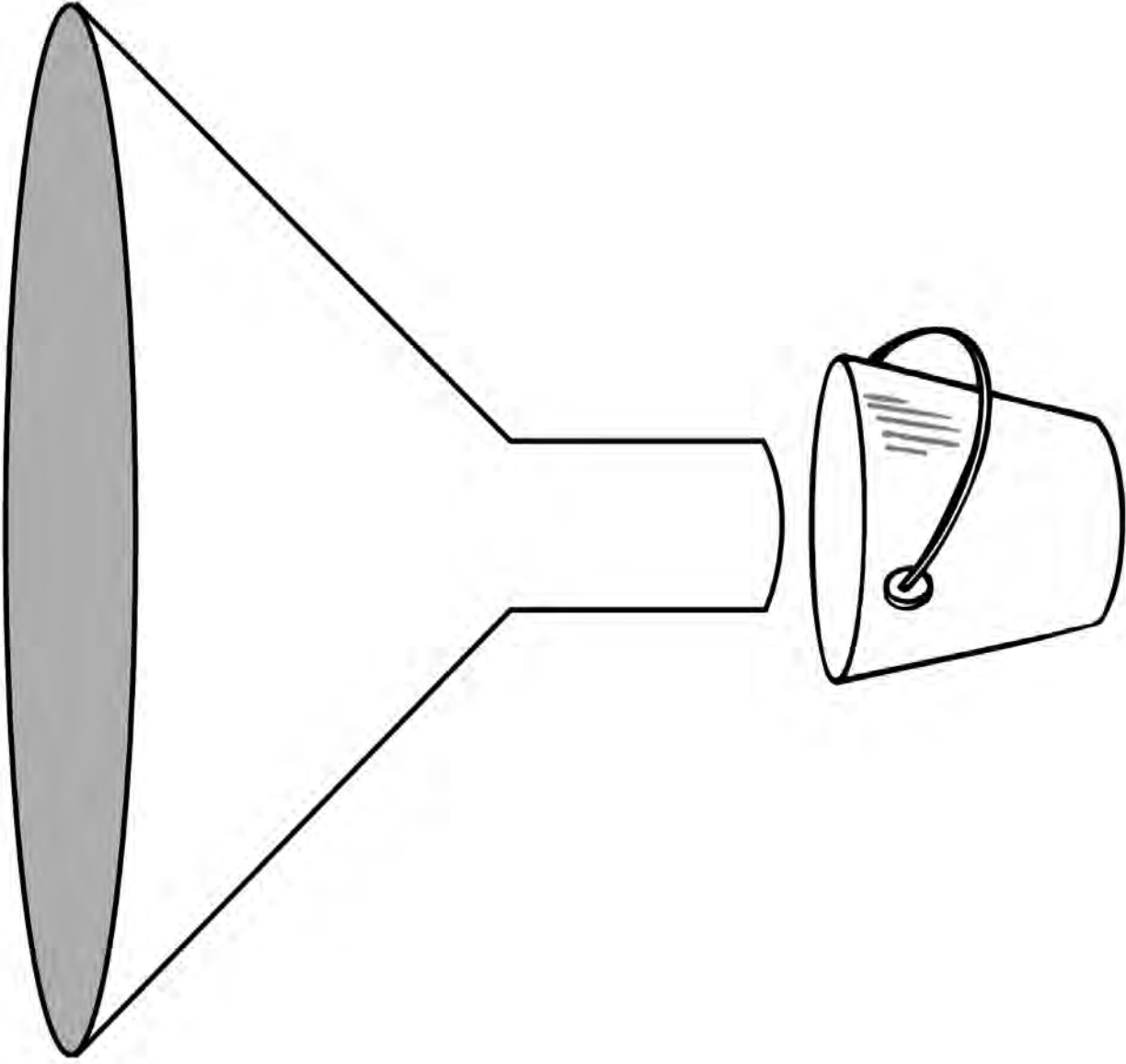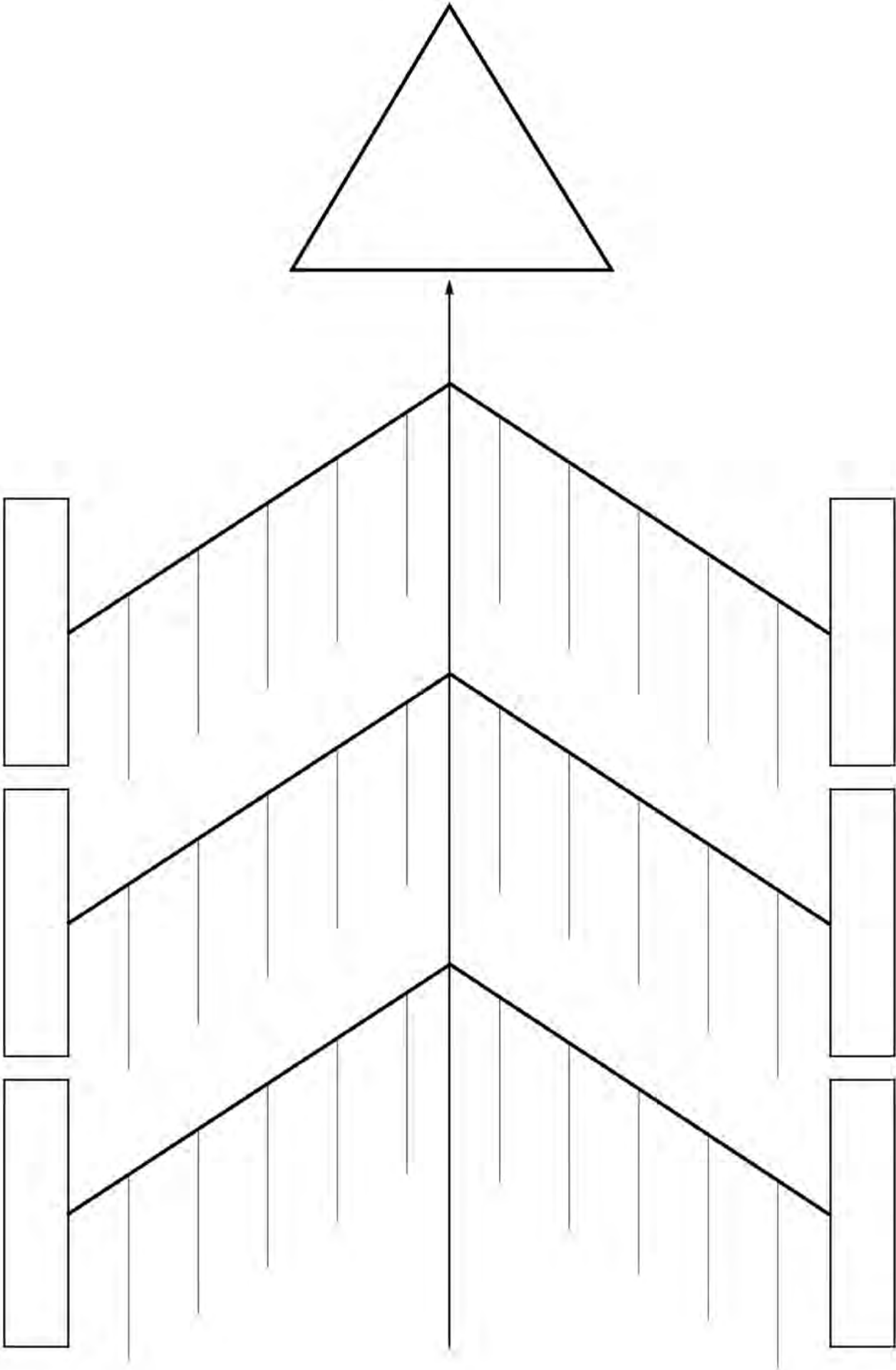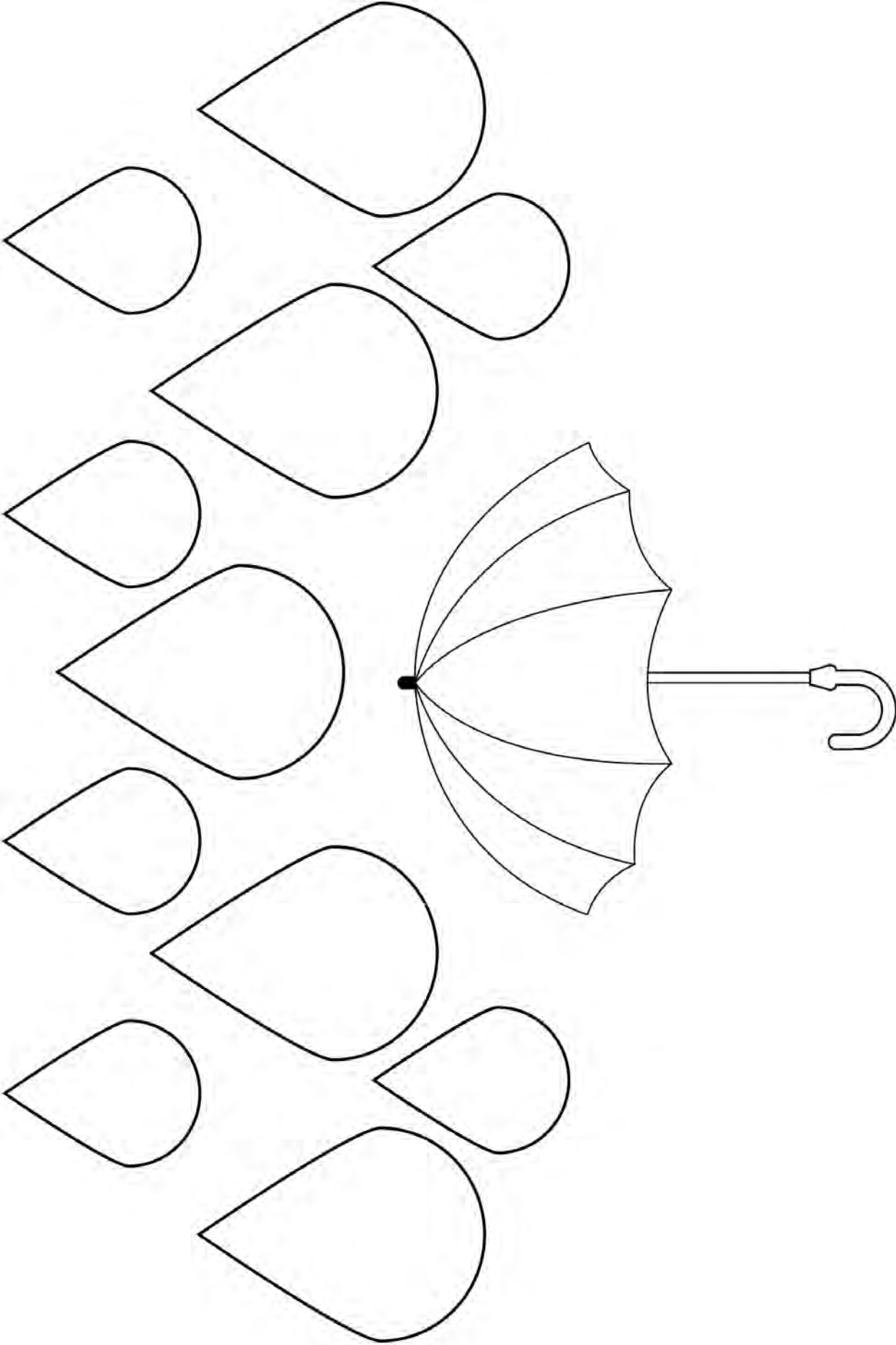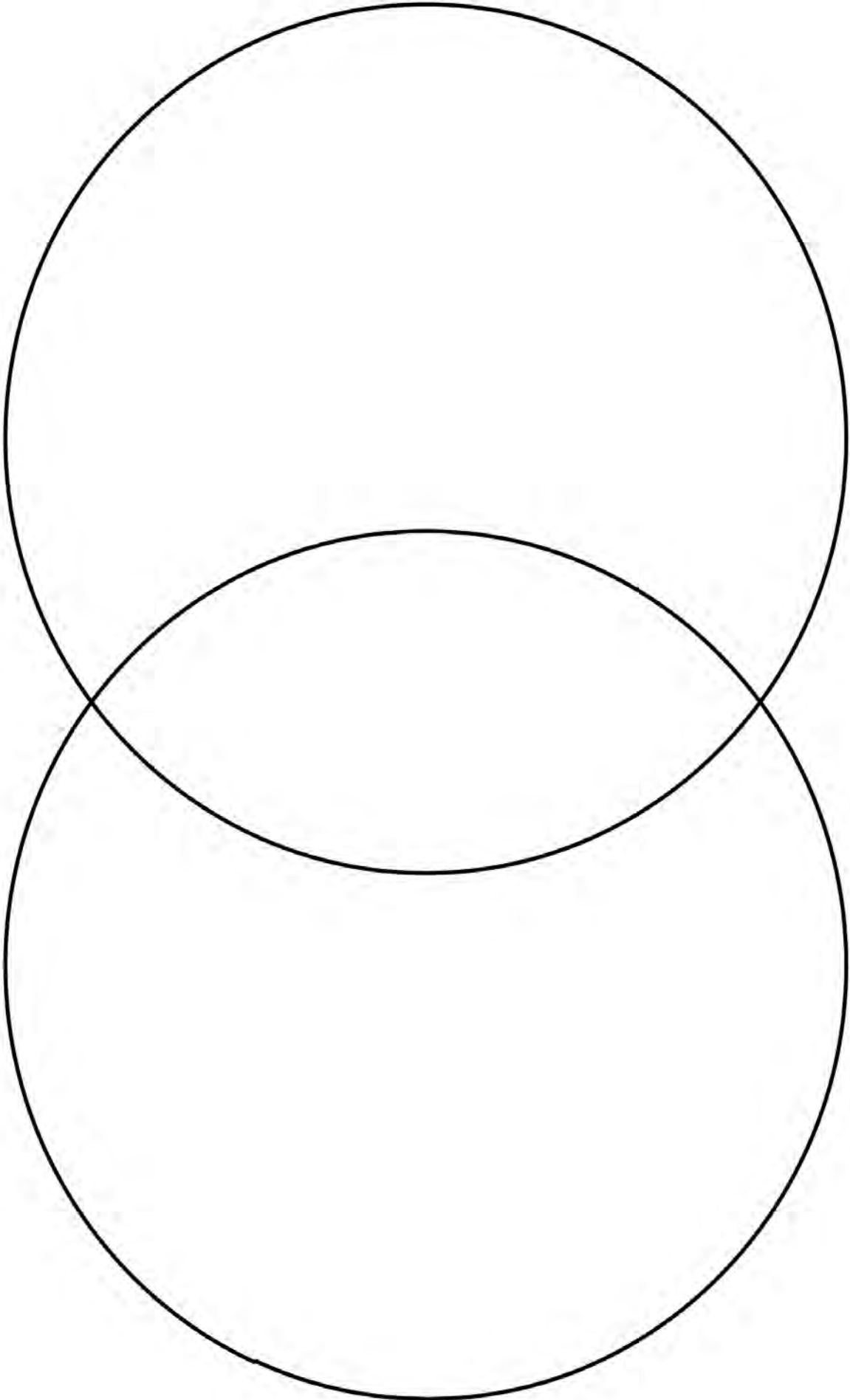*for use by students*

An Integrated Approach to Teaching, Learning & Assessment

An Integrated Approach to Teaching, Learning & Assessment

Q1	Q2
Answer	Answer

Q3	Q4
Answer	Answer

Q5	Q6
Answer	Answer

Working on Your Own Progress Card

1	Needs improvement
2	More work required
3	Satisfactory
4	Good
5	Very good

Student: _____

Week Beginning: _____

	Monday	Tuesday	Wednesday	Thursday	Friday
Student					
Teacher					

Teacher Comment

You did well on: _____

You also did well on: _____

And now you might consider: _____

_____

_____

Student Comment

What I need to do to improve when I work on my own:

_____

_____

How will I know that I am making progress when I work on my own?

(1) _____

(2) _____

(3) _____

Homework Progress Card

		Needs improvement
	1	Needs improvement
	2	More work required
	3	Satisfactory
	4	Good
	5	Very good

Student: _____

Week Beginning: _____

	Monday	Tuesday	Wednesday	Thursday	Friday
Student					
Teacher					

Teacher Comment

You did well on: _____

You also did well on: _____

And now you might consider: _____

_____

_____

Student Comment

What I need to do to improve my homework: _____

_____

_____

How will I know that I am making progress with my homework?

(1) _____

(2) _____

(3) _____

Punctuality Progress Card

			Needs improvement
	1		Needs improvement
	2		More work required
	3		Satisfactory
	4		Good
	5		Very good

Student: _____

Week Beginning: _____

	Monday	Tuesday	Wednesday	Thursday	Friday
Student					
Teacher					

Teacher Comment

You did well on: _____

You also did well on: _____

And now you might consider: _____

_____

_____

Student Comment

What I need to do to improve my punctuality:

_____

_____

How will I know that I am making progress with my punctuality?

(1) _____

(2) _____

(3) _____

Attendance Progress Card

Student: _____

Week Beginning: _____

1	Needs improvement
2	More work required
3	Satisfactory
4	Good
5	Very good

	Monday	Tuesday	Wednesday	Thursday	Friday
Student					
Teacher					

Teacher Comment

You did well on: _____

You also did well on: _____

And now you might consider: _____

_____

_____

Student Comment

What I need to do to improve my attendance:

_____

_____

How will I know that I am making progress with my attendance?

(1) _____

(2) _____

(3) _____

REFLECTING ON MY LEARNING

Today I worked really well at...

_____

_____

One thing I didn't really understand was.....

_____

_____

The most important thing I learned was.....

_____

_____

_____

One new thing I learned was.....

_____

_____

_____

One thing I could do to improve my work is....

_____

_____

For my work today I would give myself the following comment....

_____

_____

What helped me understand was......

_____

_____

Today I made a positive contribution to my group by....

_____

_____

This week I worked really well at....

_____

_____

THE SIX-STEP SCHOOL SELF-EVALUATION PROCESS FOR POST-PRIMARY SCHOOLS 2016 - 2020 [DRAFT]

Step 1 Identify Focus
Chapter 3 of the SSE Guidelines 2016-2020

In the next cycle of school self-evaluation, **teaching and learning continues to be the focus.** Schools should continue to use the process to implement national initiatives and to identify and work on aspects of their own teaching and learning practices which require development and improvement. These aspects of teaching and learning will vary according to the needs of schools. Typically, most schools will use the process to assist them in introducing and embedding relevant aspects of the *Framework for Junior Cycle.* It is expected that schools will also use the process to maintain a meaningful focus on literacy and numeracy.

* Schools should select a minimum of two and a maximum of four aspects of **teaching and learning** as the focus for their self-evaluation process from 2016 to 2020. *(see Circular 0040/2016).* They should use the teaching and learning section of *Looking at Our School 2016: A Quality Framework for Post-primary Schools* in Chapter 3 of the revised *School Self-Evaluation Guidelines* as a benchmark when reflecting on and evaluating their current practice and to identify the domain most relevant to their school - *Domains and Standards are summarised below.*

Domain / Standards

Learner Outcomes
- Attitude to learning
- Understanding of themselves and others
- Acquisition of curriculum knowledge & skills
- Levels of attainment

Learner Experiences
- Levels of engagement as learners
- Growth as learners
- Self-reflection & ownership as learners
- Development as life-long learners

Teachers' individual practice
- Teachers' knowledge & skills
- Use of practice that progress students' learning
- Use of appropriate teaching approaches
- Responsiveness to individual learning needs

Teachers' collective/collaborative practice
- Teachers' professional development & collaboration
- Co-operation to extend students' learning opportunities
- Collective use of dependable assessment practices
- Sharing of expertise to build capacity

Step 2 Gather Evidence
Chapters 4 and 5 of the SSE Guidelines 2016-2020

Always consider - relevance, simplicity & clarity, efficiency, protocol and validity of qualitative and quantitative evidence gathered.

Schools may decide to analyse assessment data and records of student progress as a starting point.

Teachers' views and their records (assessment, uptake at foundation, ordinary and higher level in specific subjects and attainment in state examinations) are useful examples of evidence.

Schools should gather information from students and parents to ensure that they have sufficient knowledge to make accurate judgements.

Professional reflection and dialogue between teachers, focusing on specific aspects of teaching and learning, are very important when gathering evidence.

As collaborative practices are further developed among the teaching staff, team teaching and professional collaborative review will become an effective means of gathering evidence.

Sample tools to support the effective gathering of evidence may be accessed at www.schoolselfevaluation.ie and should be adapted to suit the particular context of each school.

Step 3 Analyse and Make Judgements
Chapter 4 of the SSE Guidelines 2016-2020

Evaluate the effectiveness of your current practice using **statements of practice** on pages 15 to 21 of the *SSE Guidelines 2016-2020.*

Using the statements as a benchmark, schools can evaluate their own practice and make sound judgements based on the evidence they have gathered. Schools will naturally aspire to very effective practice, but should in the first instance compare their findings to the statements of effective practice. In this way, they can identify existing strengths as well as possible gaps or weaknesses. Then, by considering the statements of highly effective practice, schools can build on existing strengths and work towards excellence.

NOT EFFECTIVE ⟵ ⟶ HIGHLY EFFECTIVE

INVESTIGATIVE PHASE

Step 4
Write and share report and improvement plan

Chapter 6 of the SSE Guidelines 2016-2020

Typically, the school self-evaluation report and improvement plan should be a **single document** of no more than three pages in length. Normally, it should be completed once annually.
A template for this document is available on www.schoolself-evaluation.ie.

The final part of this step asks schools to share a **summary** of the self-evaluation report and improvement plan with the whole school community.

The first section of the document is the **report** and should outline:
• An account of progress that has been made on implementing improvement in areas that were the subject of evaluation and improvement plans in the previous year
• The new aspect of teaching and learning chosen for self-evaluation, where relevant
• The areas that the school has prioritised for improvement.

The second section of the document is the **improvement plan** and should contain:
• Targets for improvement with a focus on learner outcomes (*The setting of specific targets is the starting point. Having formed a judgement based on the relevant information or evidence, a school will be in a position to decide on specific, measurable, attainable, realistic and time bound (SMART) targets to bring about improvement. This is an important step in determining the actions that need to be taken).*
• The actions that are required to achieve the targets over three years
• Reference to who will undertake the actions outlined
• Reference to who will monitor and review the implementation and progress
• Reference to how parents can help
• A timeframe for the achievement of the targets

Note re: DEIS schools: The school's DEIS action plan is its school improvement plan for the purposes of school self-evaluation, and no additional or separate improvement plan is required.

Step 5
Put Improvement Plan into action

This is the key step in the process. It is only when the actions in the improvement plan are implemented that the work of the school can improve. All relevant school personnel should share ownership of the actions to be implemented at individual teacher, subject department, or whole-school level. These actions should become part of the normal teaching and learning process.

Step 6
Monitor Actions and Evaluate Impact

In order to evaluate the impact of the actions, they must be monitored. A number of questions are useful when considering this:
• Has practice changed in classrooms?
• What are teachers' experiences of the agreed changes?
• What are students' experiences of the agreed changes?
• What is the impact on student learning?

Schools will need to decide:
• How monitoring will occur
• Who will be responsible for monitoring
• How progress will be determined and reported
• When and to whom progress will be reported (for example, at staff meetings, planning meetings, board meetings)
• If targets and actions are realistic or need to be changed.

The role of those leading the process, and the role of all teachers, in the ongoing and systematic monitoring of the implementation of the plan is important. In this regard, the gathering and use of information at specified intervals to check if the required improvements are being made is necessary. The implementation of the school improvement plan ultimately leads to a new cycle of school self-evaluation.

The four year period allows for an investigation year for scoping out and developing the improvement plan, and preparing for its implementation. However some schools may feel confident that they can implement an improvement plan without a preliminary investigation year, for e.g. where baseline data is already available and the actions required are clear.

The graphic below (taken from page 3 of Circular 0040/2016) sets out how the process would work over a four-year period in which a school selects three aspects of teaching and learning. For *illustrative purposes only,* *it provides examples of how aspects of the Framework for Junior Cycle can be implemented through the self-evaluation process. Schools should refer to Circular 0024/2016, Arrangements for the Implementation of the Framework for Junior Cycle, for specific requirements.*

Literacy and numeracy practices embedded, with regular review - 2016-2020

Assessment practices	Investigation year 2016/17	Implementation year 2017/18	Consolidation year 2018/19	Review year 2019/20
Teaching and learning the key skills	-	Investigation year 2017/18	Implementation year 2018/19	Consolidation year 2019/20
Engagement in learning	-	-	Investigation year 2018/19	Implementation year 2019/20

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