

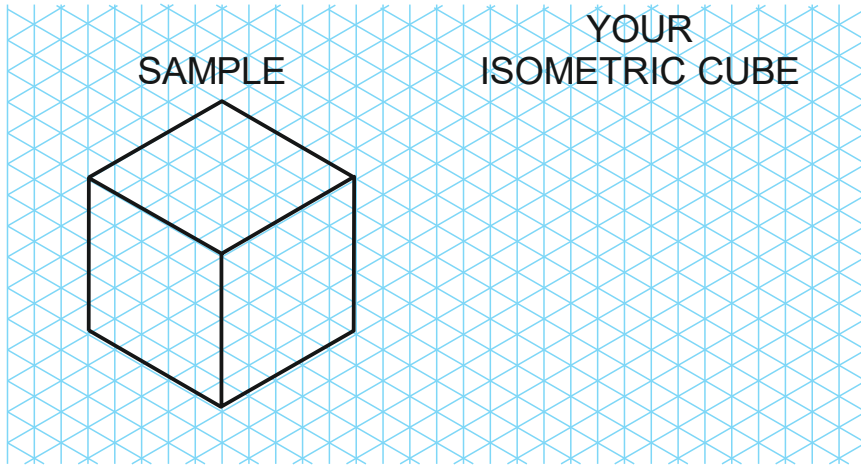
You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# INTRODUCTION TO ISOMETRIC DRAWING

## EXERCISE 1

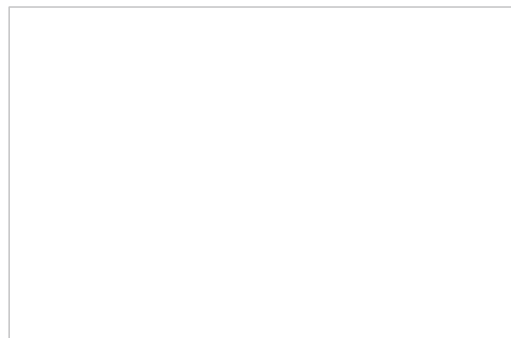
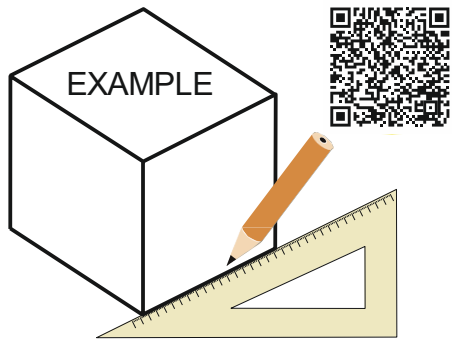
What you need to do:

Using a ruler / set square, draw a copy of the isometric cube, alongside the sample.



## EXTENSION WORK

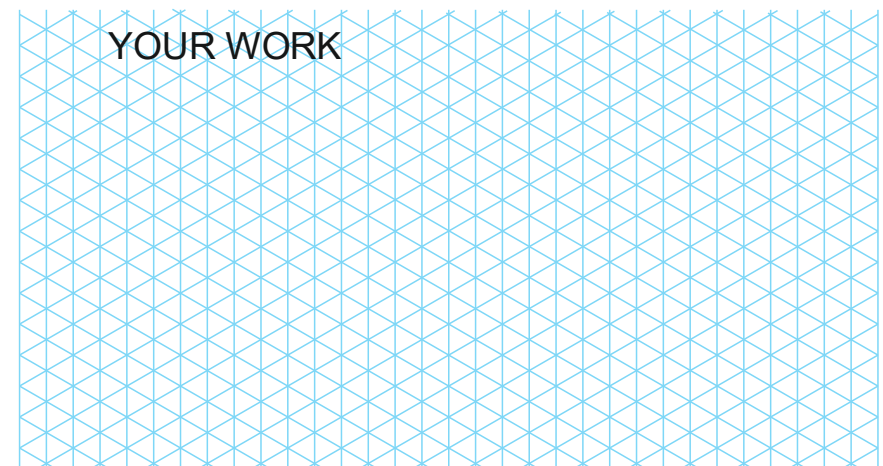
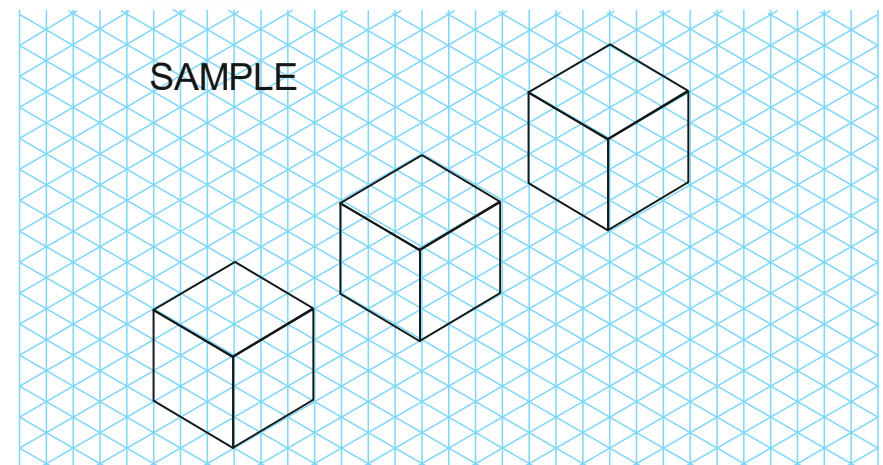
Alongside the example, draw an isometric cube, using a 30 degree set square. If you do not have a set square, use a ruler and estimate the angles. *All the sides should be the same size.*



## EXERCISE 2

What you need to do:

Using the grid at the bottom of the page: Draw three isometric cubes, in line with each other and equally spaced, as shown below.



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# INTRODUCTION TO ISOMETRIC DRAWING

B

WORLD ASSOCIATION OF TECHNOLOGY TEACHERS

<https://www.facebook.com/groups/254963448192823/>

[www.technologystudent.com](http://www.technologystudent.com) © 2020 V.Ryan © 2020

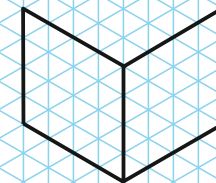
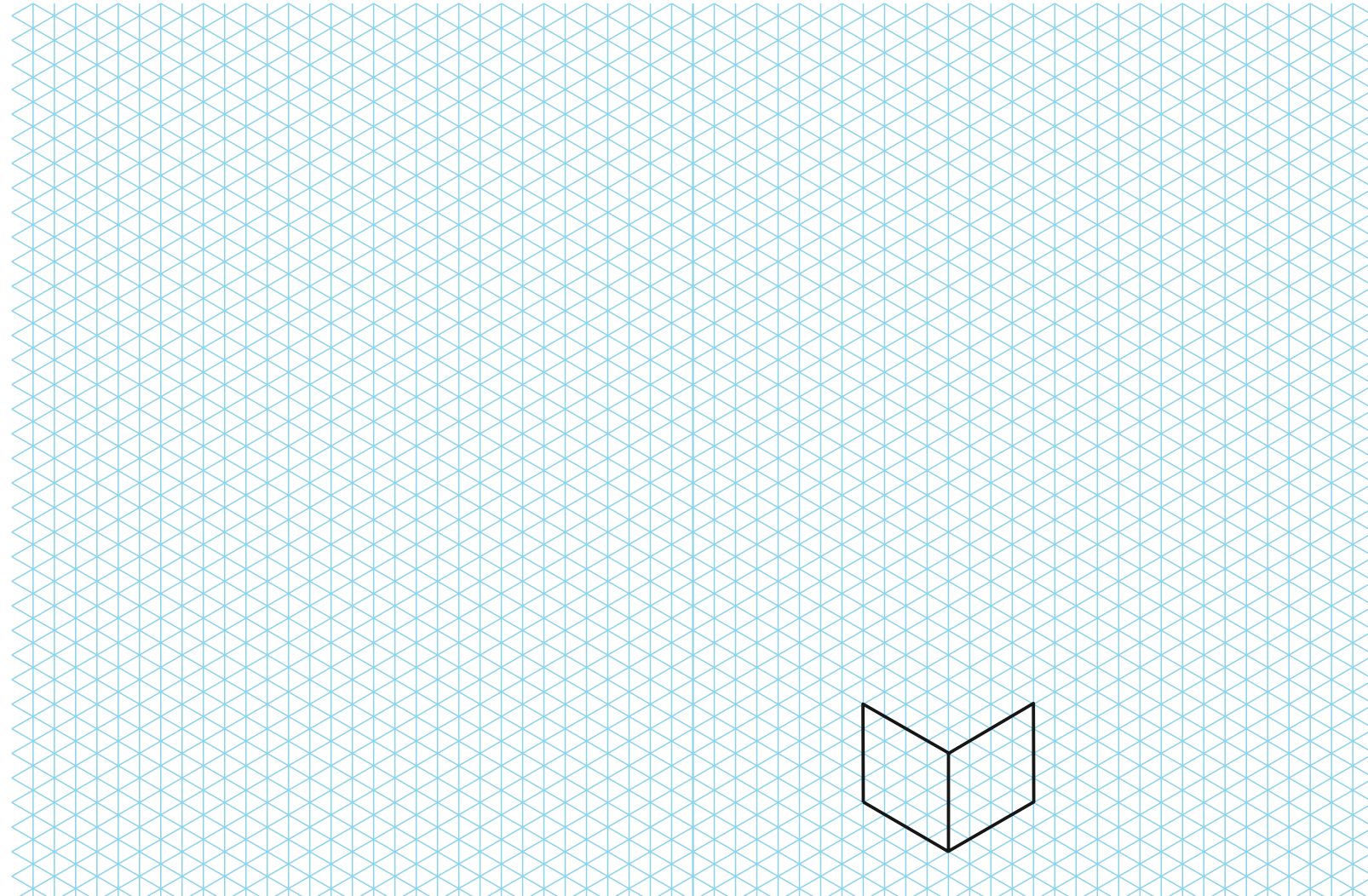
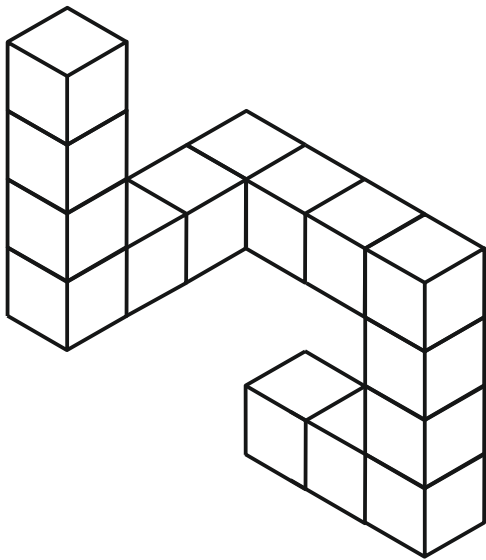
## EXERCISE 3

What you need to do:

Using the cube at the bottom of the isometric grid as the starting point, construct a pattern of isometric cubes. Each cube must be the same size. A sample pattern is shown alongside the grid. Follow the link for guidance.



SAMPLE PATTERN



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# INTRODUCTION TO ISOMETRIC DRAWING

WORLD ASSOCIATION OF TECHNOLOGY TEACHERS

<https://www.facebook.com/groups/254963448192823/>

[www.technologystudent.com](http://www.technologystudent.com) © 2020 V.Ryan © 2020

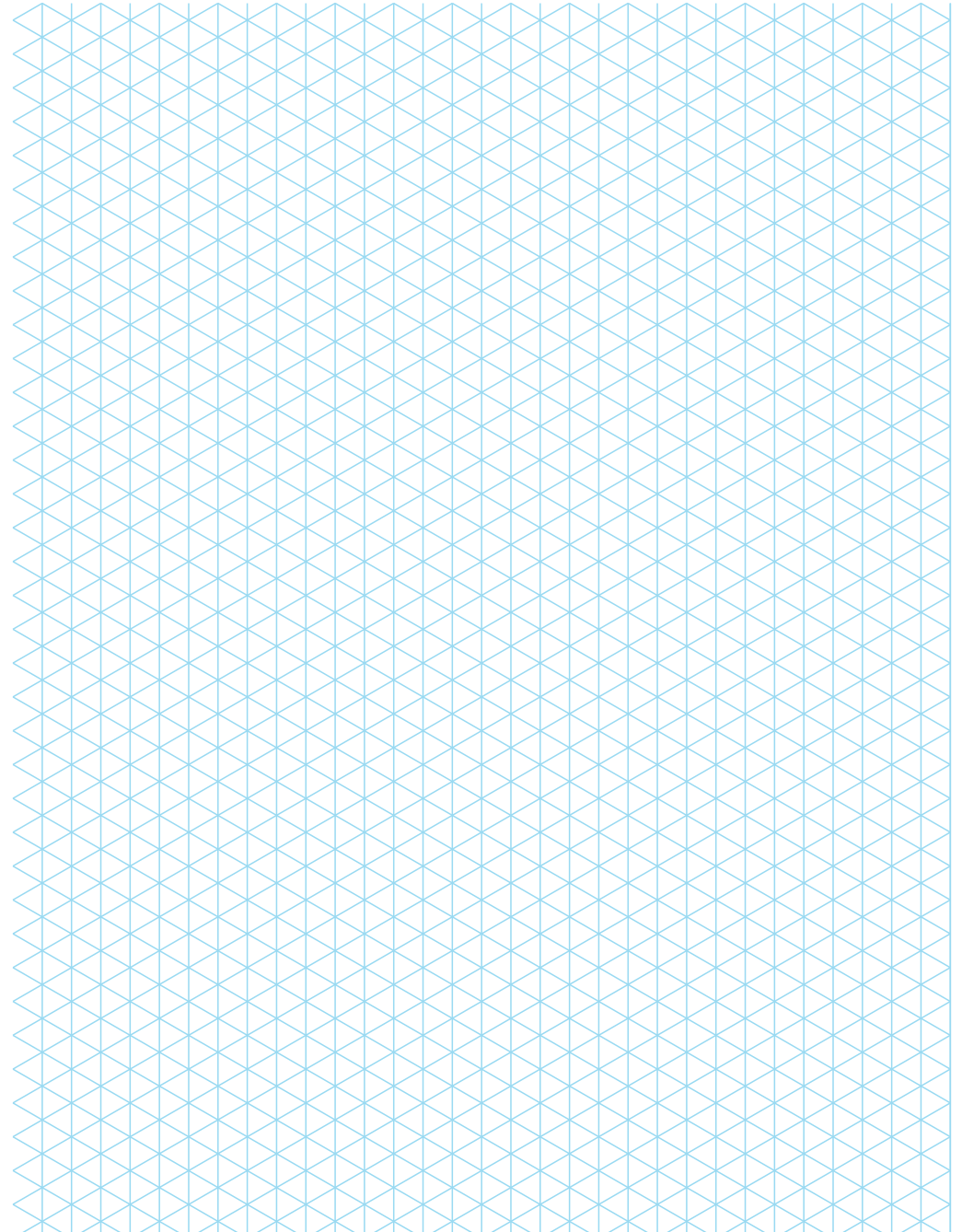
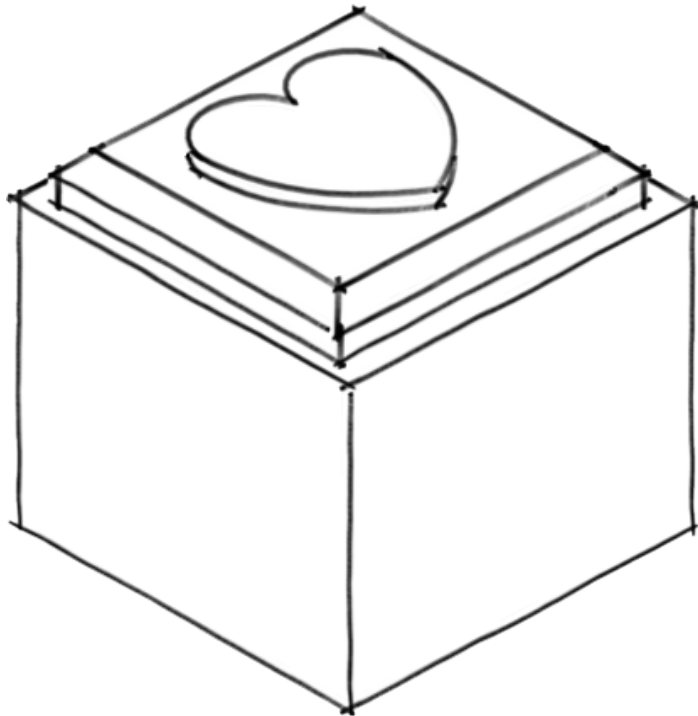
C

## EXERCISE 4

What you need to do

A 3D isometric sketch of a typical container is drawn below.

Using the isometric grid, draw your version of the container.



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# ISOMETRIC SKETCHING

D

WORLD ASSOCIATION OF TECHNOLOGY TEACHERS

<https://www.facebook.com/groups/254963448192823/>

[www.technologystudent.com](http://www.technologystudent.com) © 2020 V.Ryan © 2020

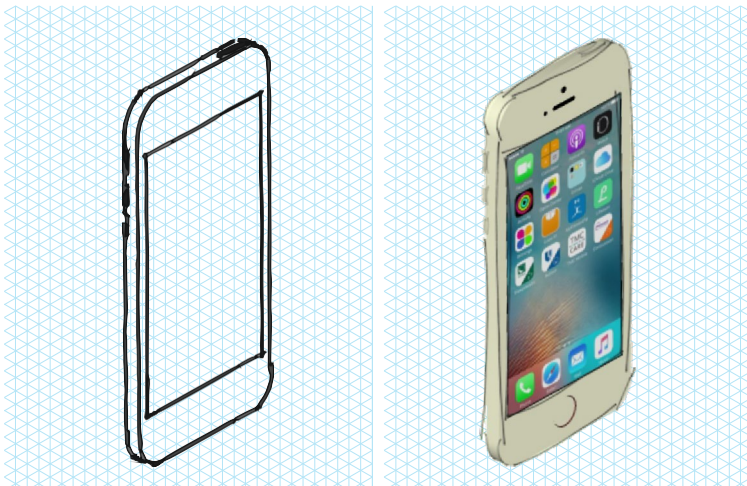
## EXERCISE 1

What you need to do:

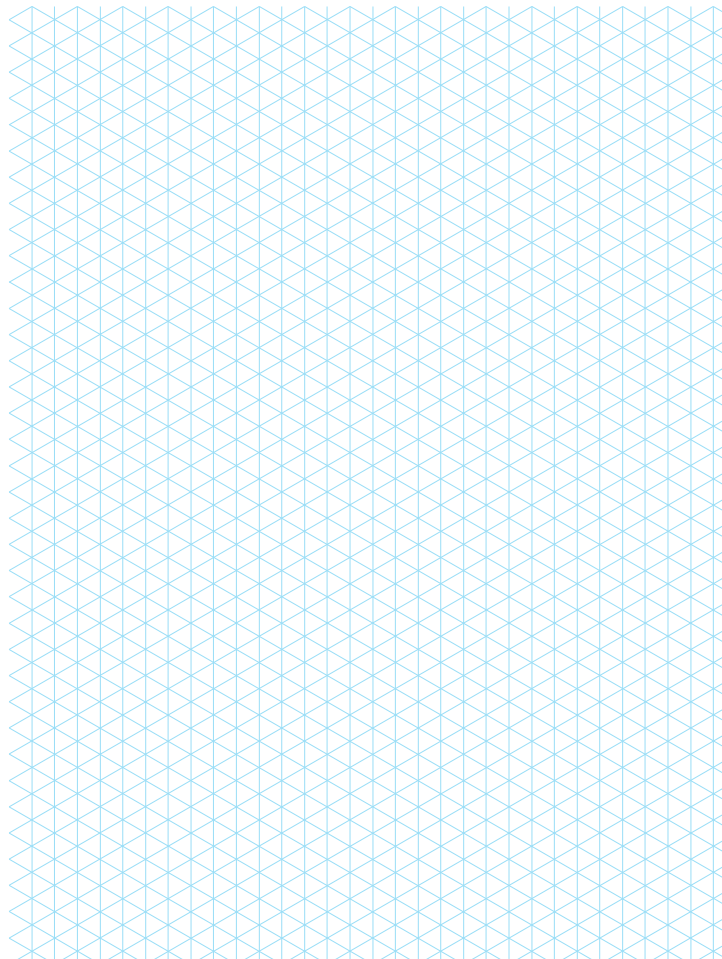
STUDY THE THREE VIEWS OF THE MOBILE PHONE SEEN BELOW. USING THE ISOMETRIC GRID, SKETCH AN ACCURATE 3D OUTLINE VERSION. THEN, ADD REALISTIC COLOUR AND SHADE



EXAMPLE



## YOUR ISOMETRIC SKETCH



## EXTENSION WORK

COLLECT A RANGE OF IMAGES OF MUSIC PLAYING DEVICES, FOR USE LATER. Some examples are shown below.



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# ISOMETRIC SKETCHING

E

WORLD ASSOCIATION OF TECHNOLOGY TEACHERS

<https://www.facebook.com/groups/254963448192823/>

[www.technologystudent.com](http://www.technologystudent.com) © 2020 V.Ryan © 2020

## EXERCISE 2

What you need to do:

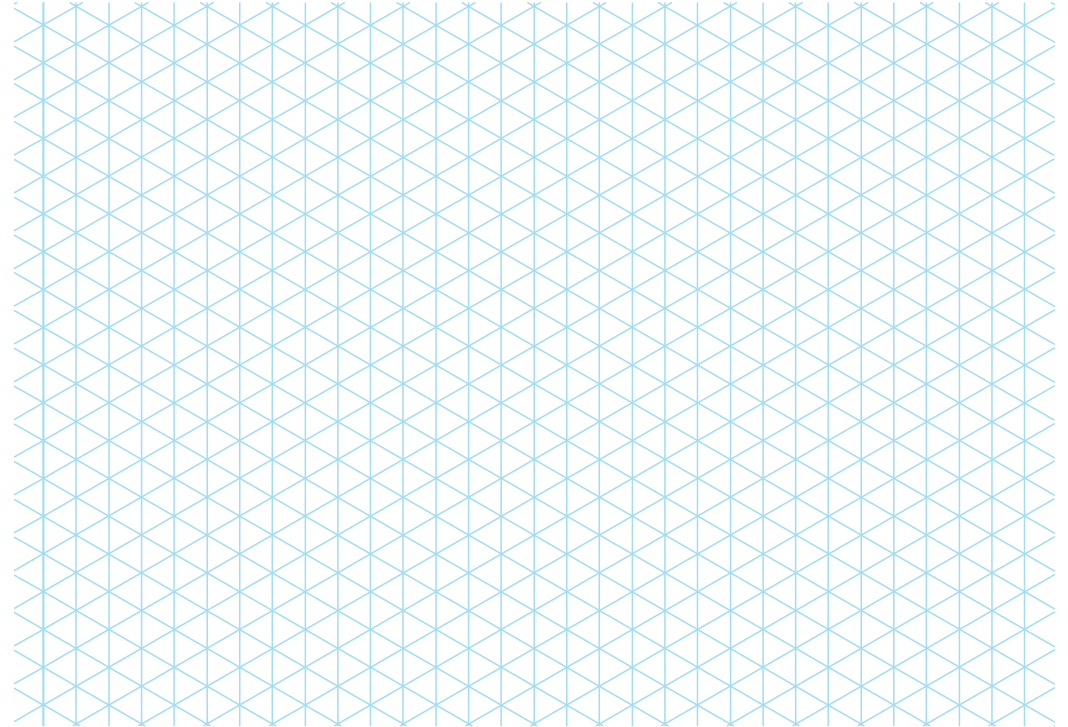
USING THE ISOMETRIC GRID, DRAW THE MP3 PLAYER IN ISOMETRIC PROJECTION.  
ADD SUITABLE COLOUR AND SHADE.  
ADD 'THICK LINES' TO EMPHASISE SOME EDGES.



### EXAMPLE



### YOUR ISOMETRIC SKETCH



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# ISOMETRIC SKETCHING

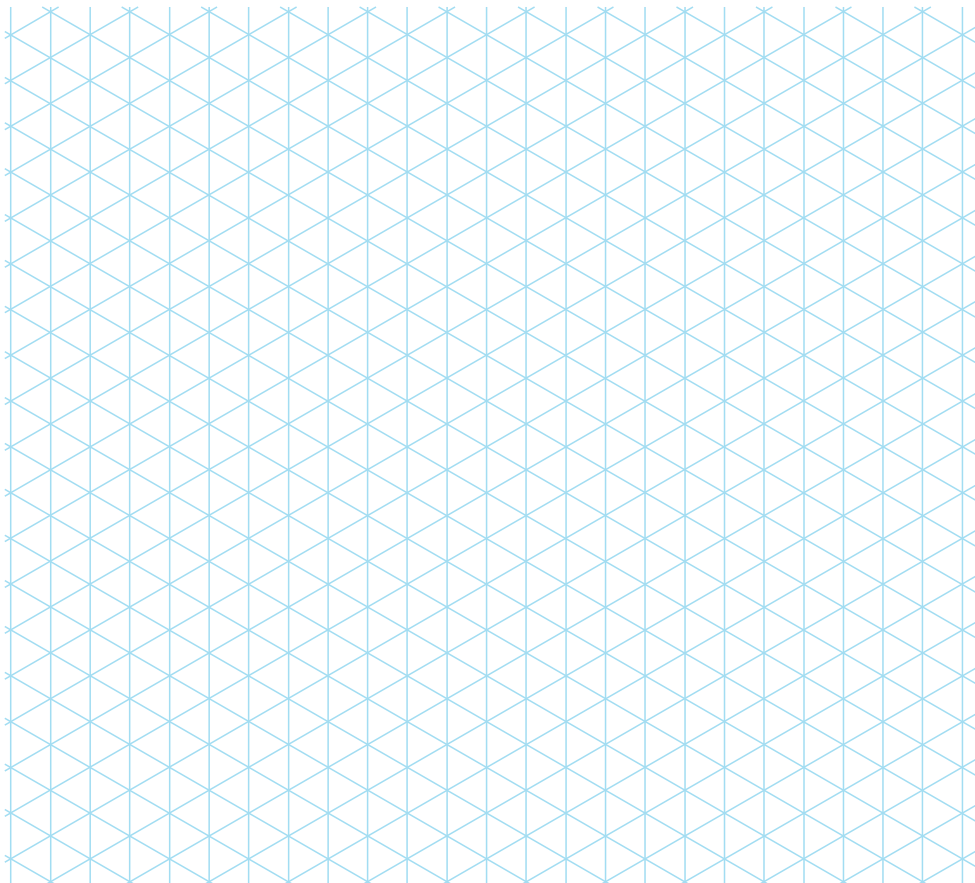
## EXTENSION WORK

What you need to do:

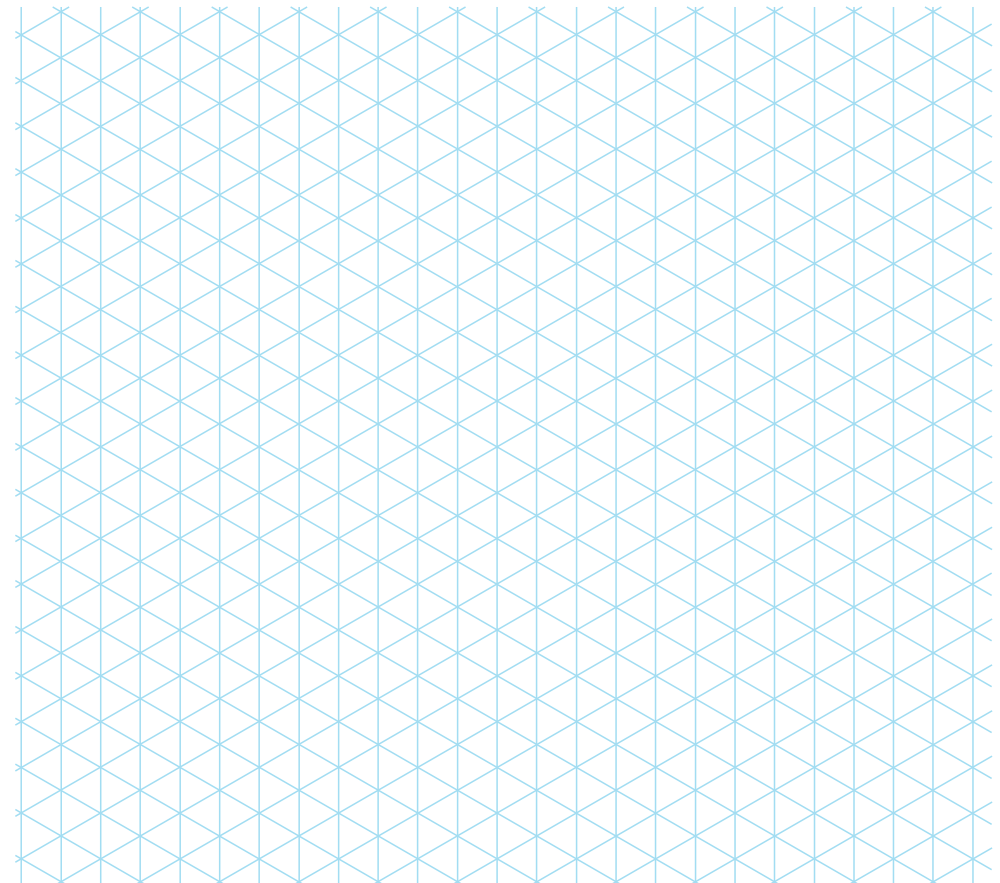
SELECT ONE OF THE IMAGES YOU COLLECTED FOR THE EXTENSION WORK OF PAGE / SLIDE 'A'.  
DRAW / SKETCH IT IN ISOMETRIC, ON THIS PAGE / SLIDE.



**PRACTICE ISOMETRIC SKETCH**  
*(if you feel this will help)*



**ACCURATE ISOMETRIC SKETCH OF YOUR  
SELECTED MUSIC DEVICE**



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# ISOMETRIC PRINTING

## EXERCISE 3

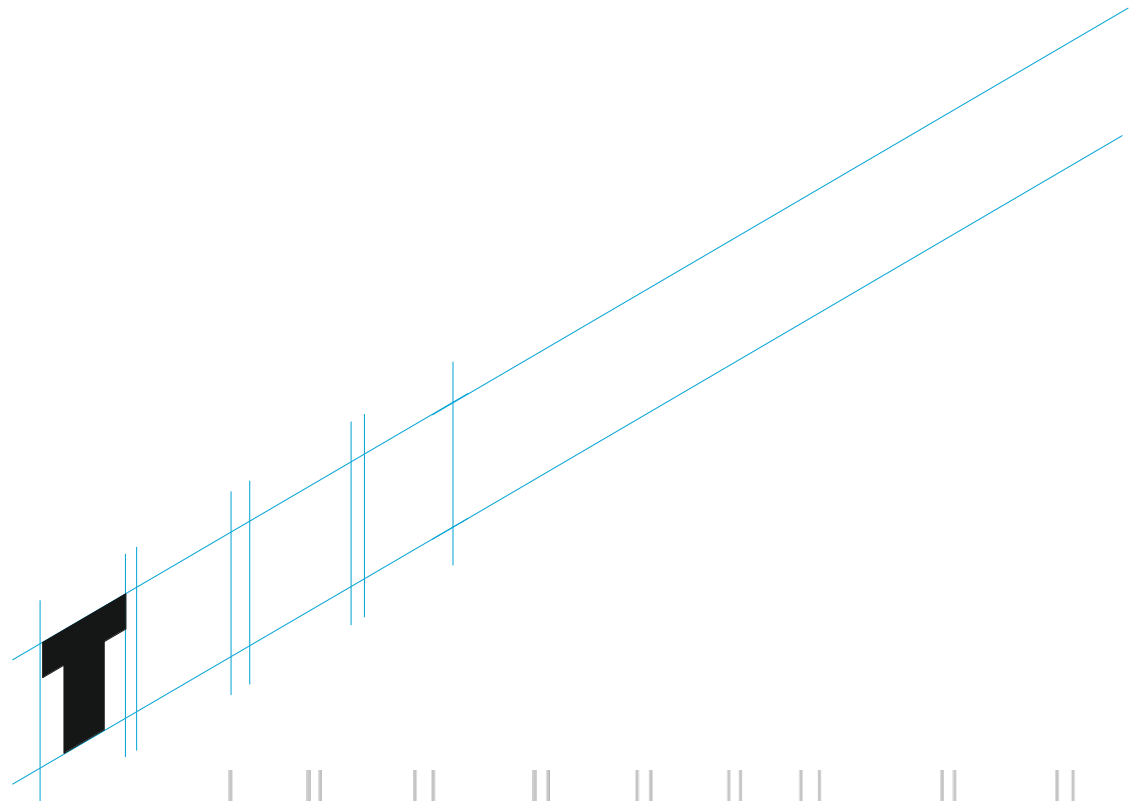
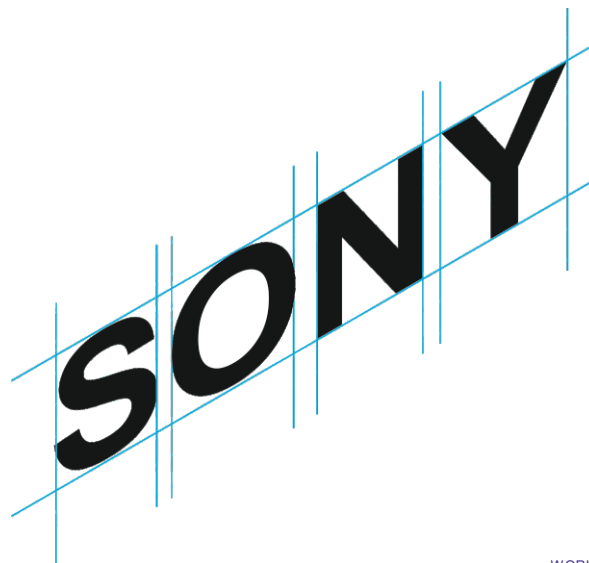
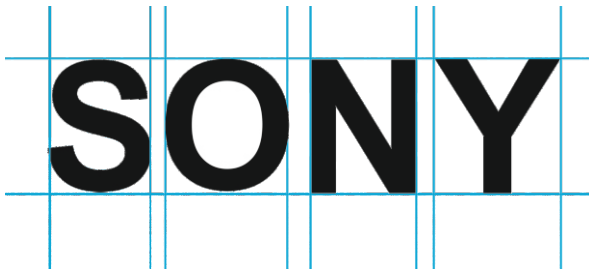
What you need to do:

THE PHRASE 'THE WORLD', IS PRINTED AT THE BOTTOM OF THE PAGE / SLIDE. COMPLETE THE ISOMETRIC VERSION, USING THE ISOMETRIC GUIDELINES. THE FIRST FEW VERTICAL DIVIDES BETWEEN LETTERS, HAVE BEEN DRAWN FOR YOU. THESE NEED TO BE CONTINUED AS YOU ADD EACH LETTER.



### EXAMPLE

THE PRINTING SHOWN BELOW, HAS BEEN DRAWN IN ITS NORMAL PLAIN STYLE AND ALSO AS ISOMETRIC LETTERING.



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# ISOMETRIC DRAWING AND PRINTING

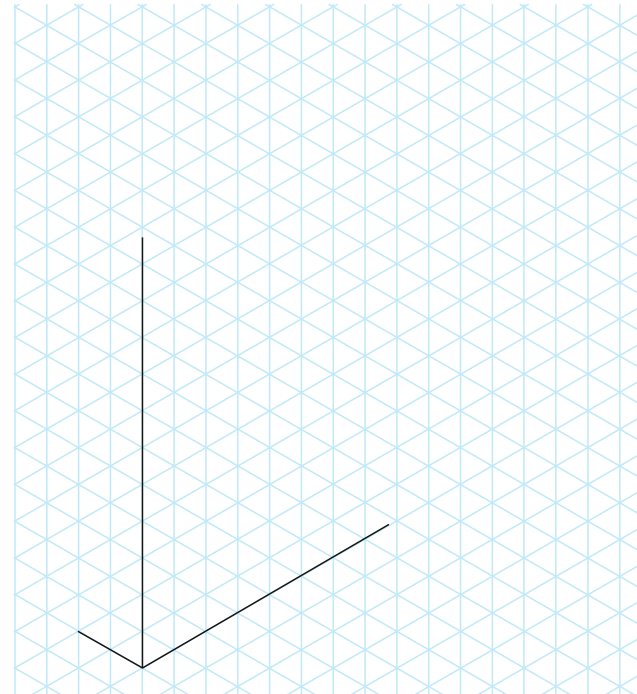
## EXERCISE 4

**What you need to do:**

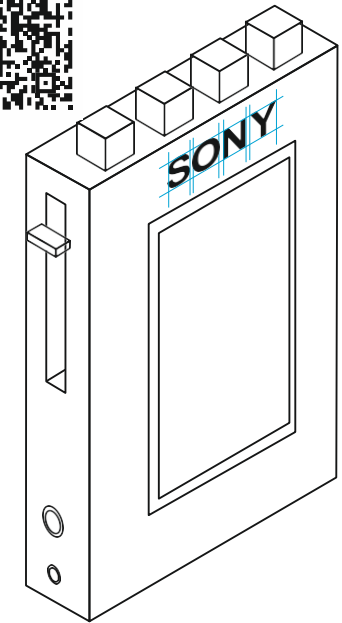
The Sony Walkman, introduced in 1978, was the original personal music system and played audio cassette tapes.

It represented the best miniaturised technology of the era and started a revolution in portable music devices. Its equivalent today is the iPod.

**Draw the personal stereo with the help of the isometric grid.**



**EXAMPLE**



## EXTENSION WORK

**What you need to do:**

**DESIGN YOUR OWN MUSIC DEVICE.  
SKETCH A ROUGH VERSION / A NUMBER OF ROUGH VERSIONS.  
SELECT YOUR BEST DESIGN AND DRAW IT ACCURATELY IN ISOMETRIC**



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# ISOMETRIC - CIRCLES

WORLD ASSOCIATION OF TECHNOLOGY TEACHERS

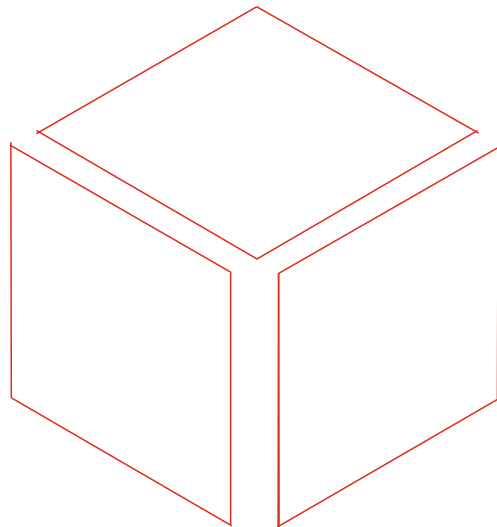
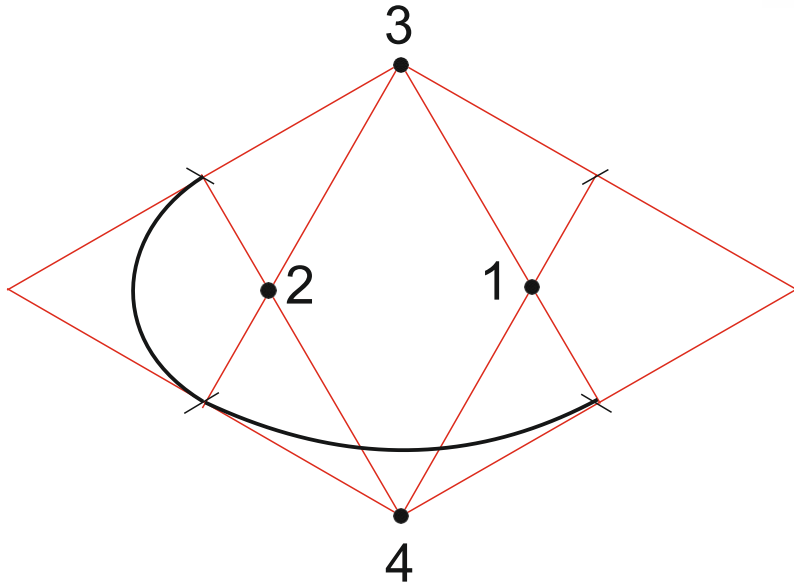
<https://www.facebook.com/groups/254963448192823/>

[www.technologystudent.com](http://www.technologystudent.com) © 2020 V.Ryan © 2020

## EXERCISE 1

What you need to do:

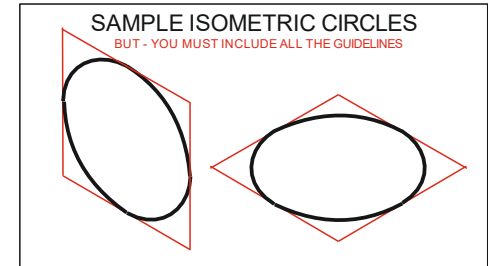
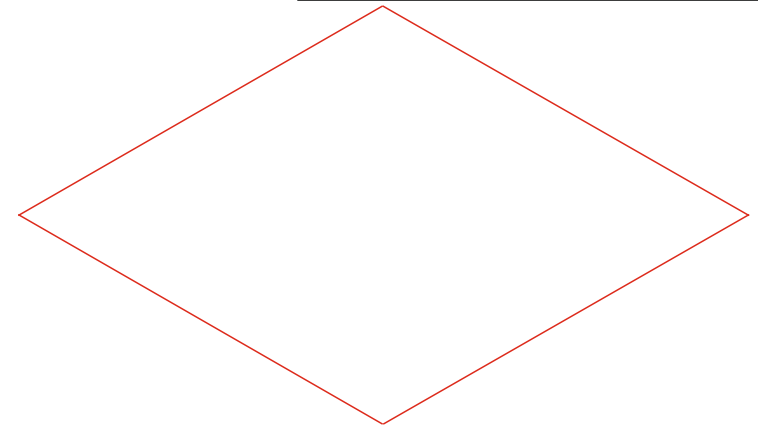
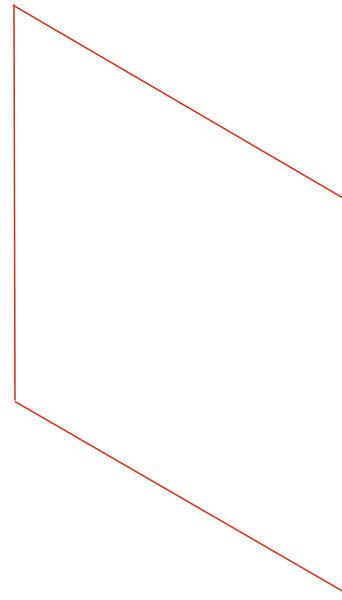
USING THE 'COMPASS TECHNIQUE', COMPLETE THE ISOMETRIC CIRCLE.



## EXERCISE 2

What you need to do:

DRAW ISOMETRIC CIRCLES IN THE SQUARES, USING THE COMPASS TECHNIQUE. DO NOT ERASE ANY ISOMETRIC GUIDELINES YOU DRAW, TO HELP COMPLETE THE QUESTION.



## EXTENSION WORK

DRAW THREE ISOMETRIC CIRCLES IN EACH OF THE ISOMETRIC RECTANGLES, USING THE COMPASS TECHNIQUE

What you need to do:



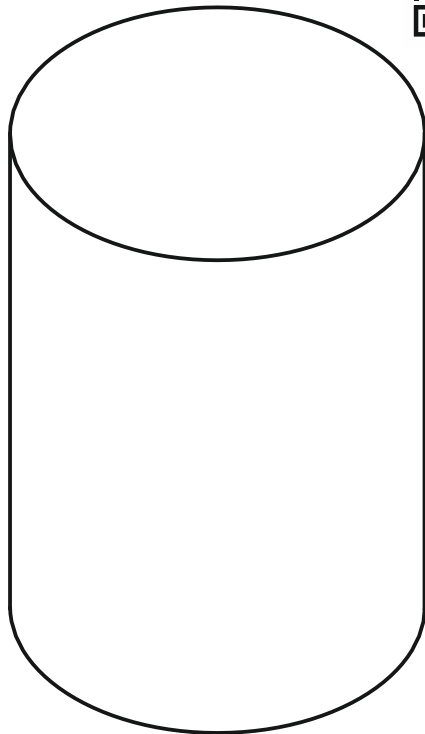
## EXERCISE 3

What you need to do:

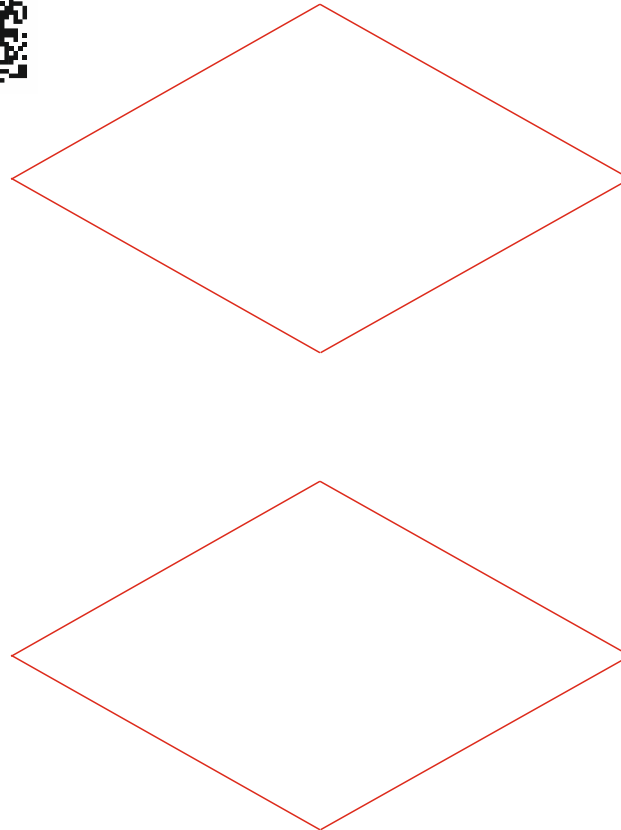
BELOW IS A CYLINDER, DRAWN IN ISOMETRIC. DRAW AN EXACT COPY ALONGSIDE THE ORIGINAL. USE THE COMPASS METHOD, WHEN DRAWING THE ISOMETRIC CIRCLES. DO NOT ERASE ANY ISOMETRIC GUIDELINES YOU DRAW, TO HELP COMPLETE THE QUESTION. THE ISOMETRIC RECTANGLES HAVE BEEN DRAWN FOR YOU.



SAMPLE



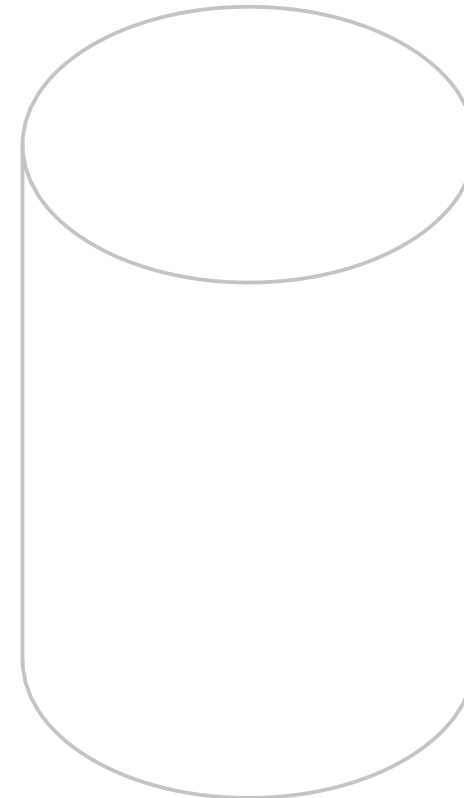
YOUR CYLINDER



## EXERCISE 4

What you need to do:

USING THE FAINT CYLINDER OUTLINE BELOW, ADD COLOUR / SHADE AND A BOLD OUTLINE. Consider using the line technique, combined with 'dark to light' shading.



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# ISOMETRIC CYLINDERS

K

WORLD ASSOCIATION OF TECHNOLOGY TEACHERS

<https://www.facebook.com/groups/254963448192823/>

[www.technologystudent.com](http://www.technologystudent.com) © 2020 V.Ryan © 2020

## EXTENSION WORK

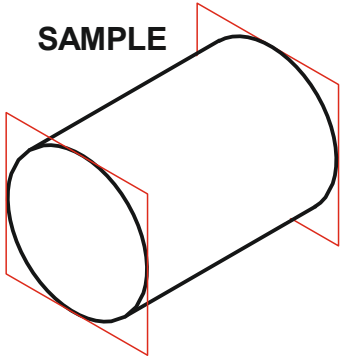
What you need to do:

DRAW AN ISOMETRIC CYLINDER, USING THE TWO ISOMETRIC SQUARES, AS THE 'CIRCULAR ENDS'.

What you need to do:

USING THE INTERNET, COLLECT IMAGES OF OBJECTS / PRODUCTS, THAT HAVE BEEN DRAWN IN ISOMETRIC PROJECTION. PASTE THE IMAGES BELOW.

SAMPLE



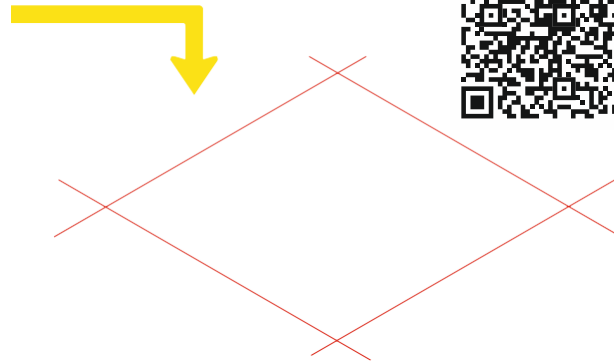
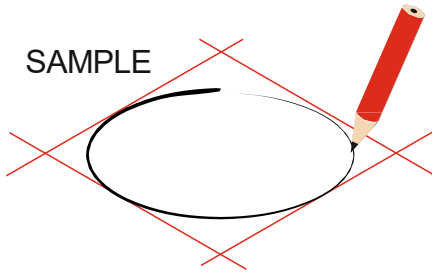
## EXERCISE 5

**What you need to do:**

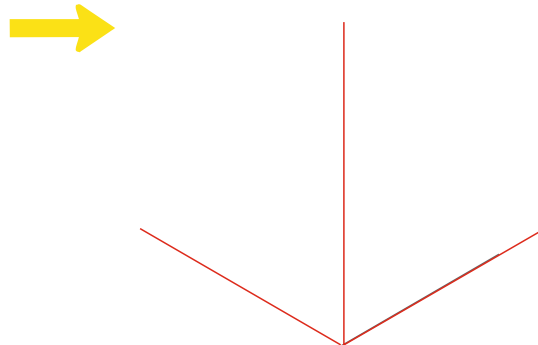
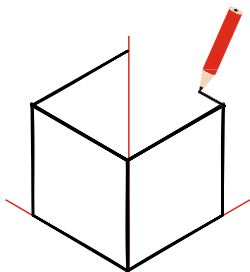
THESE QUESTIONS ARE ABOUT 'SKETCHING' IN ISOMETRIC.  
YOU CAN USE A SET SQUARE / RULER TO DRAW ADDITIONAL QUICK, FAINT GUIDELINES. ALL OTHER LINES SHOULD BE SKETCHED.



SKETCH AN ISOMETRIC CIRCLE, USING THE GUIDELINES SHOWN OPPOSITE.



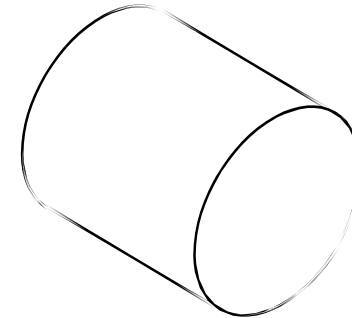
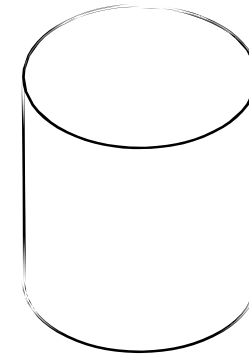
SKETCH AN ISOMETRIC CUBE, USING THE GUIDELINES SHOWN OPPOSITE. ADD FURTHER GUIDELINES, AS YOU NEED THEM.



## EXERCISE 6

**What you need to do:**

SKETCH THE TWO CYLINDERS SHOWN BELOW, IN ISOMETRIC. DO NOT ERASE ANY ISOMETRIC GUIDELINES YOU DRAW, TO HELP COMPLETE THE QUESTION.



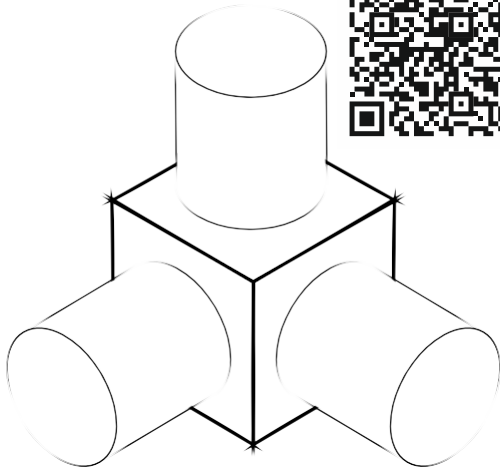
You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

# SKETCHING IN ISOMETRIC

## EXERCISE 7

What you need to do:

ACCURATELY SKETCH THE OBJECT SHOWN BELOW, IN ISOMETRIC. DO NOT ERASE ANY ISOMETRIC GUIDELINES YOU DRAW, TO HELP COMPLETE THE QUESTION.



## EXTENSION WORK

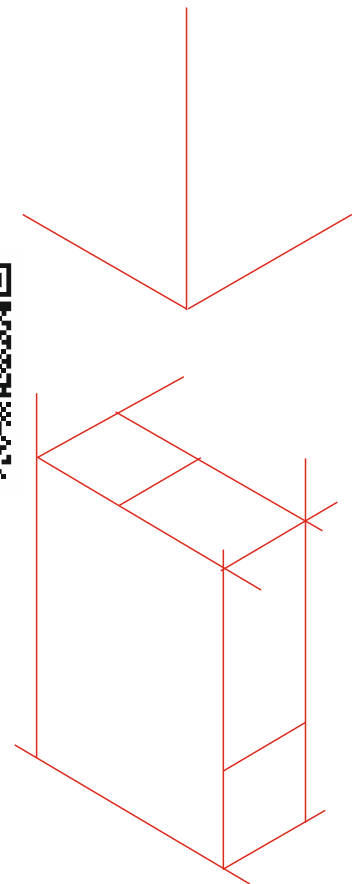
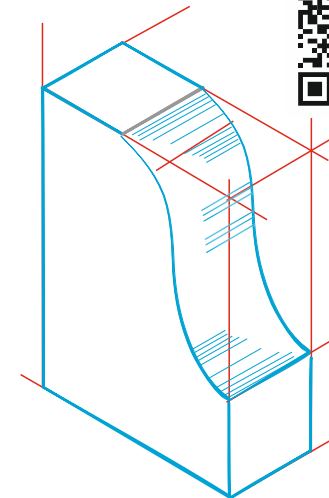
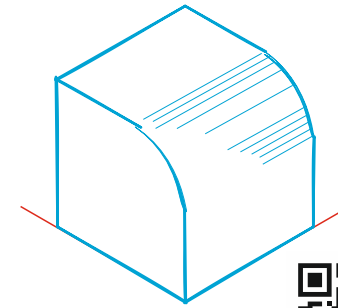
ADD APPROPRIATE COLOUR / SHADE TO YOUR ISOMETRIC SKETCH. CONSIDER USING A COMBINATION OF THE LINE TECHNIQUE AND LIGHT TO DARK SHADING.



## EXERCISE 8

What you need to do:

SKETCH THE SHAPES, IN ISOMETRIC. DO NOT ERASE ANY ISOMETRIC GUIDELINES YOU DRAW. INCLUDE THE 'SIMPLE' SHADING.



You will need to print out this page, to complete the exercise. Click on the link, where it appears on this sheet, for guidance and samples.

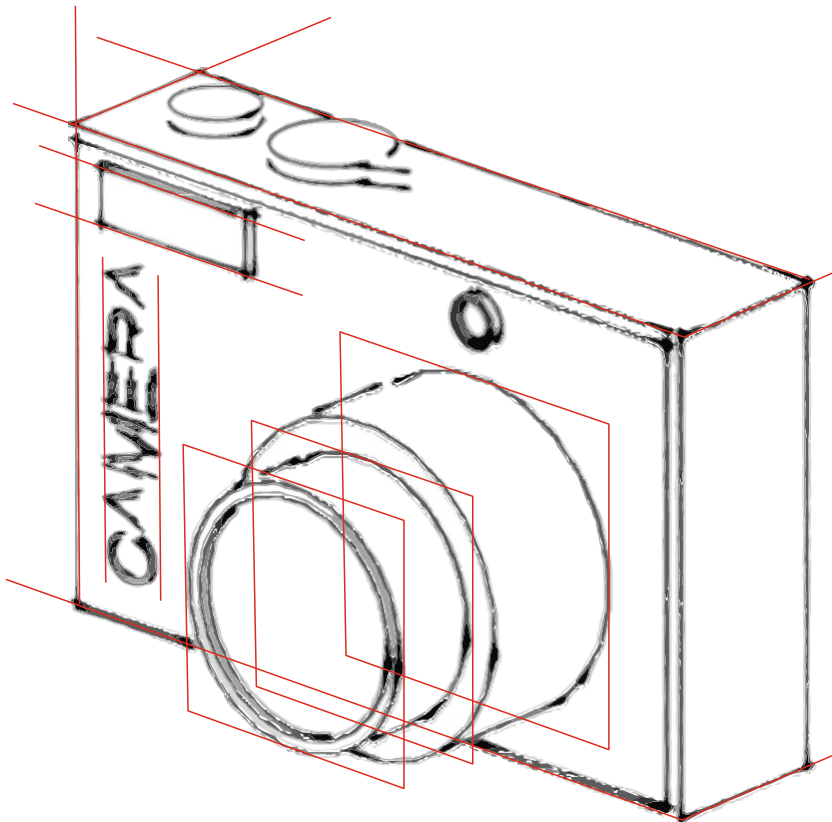
# SKETCHING IN ISOMETRIC

## EXTENSION WORK

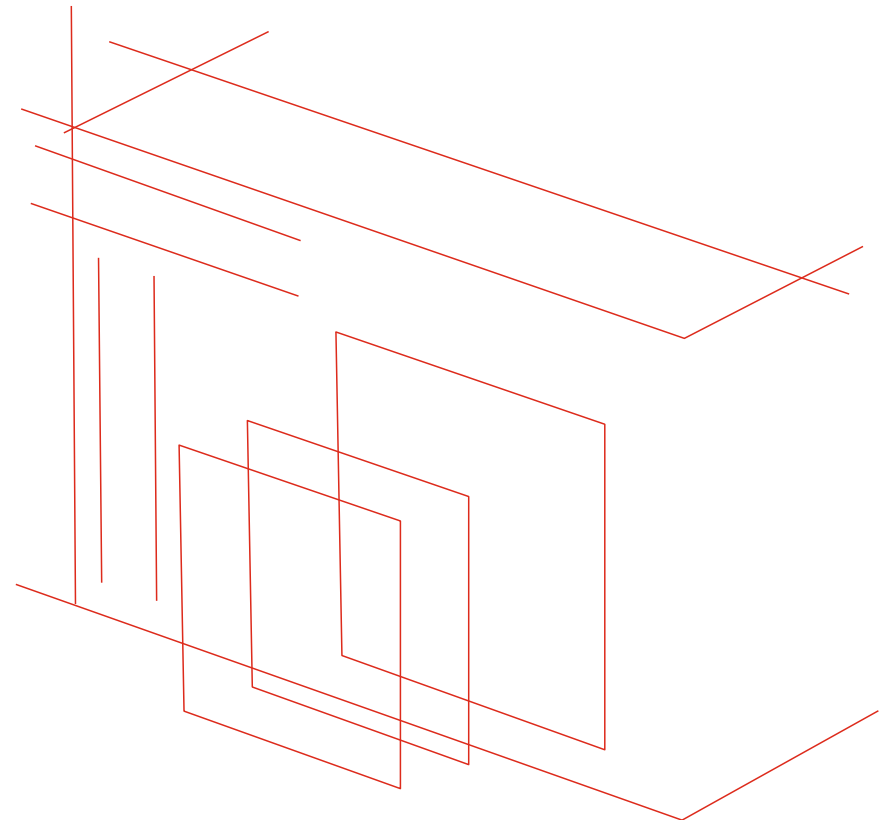
What you need to do:

STUDY THE SKETCH OF THE CAMERA. IN THE SPACE OPPOSITE, SKETCH AN ACCURATE ISOMETRIC COPY. DO NOT ERASE ANY ADDITIONAL ISOMETRIC GUIDELINES YOU DRAW, TO HELP YOU COMPLETE THE QUESTION. ADD APPROPRIATE COLOUR / SHADE.

SAMPLE



YOUR WORK



## FURTHER EXTENSION WORK

What you need to do:

TRY DRAWING SOME OF THE PREVIOUS EXERCISES REGARDING CIRCLES AND CYLINDERS, USING THE 'ORDINATE' TECHNIQUE. THIS IS AN ALTERNATIVE WAY OF DRAWING ISOMETRIC CIRCLES AND CURVES ACCURATELY.

