Grid Drawing Lesson Plan
for CopyIt For Kids

Nigel Green - Lighthouse Software

Available on the App Store

Copyright

Dedication

"To my best friend and soul mate, my darling wife Elizabeth, thank you for your patience, love and support. I am blessed to be able to share my life with you.

Thanks also to the many users of CopyIt who have provided feedback and new feature suggestions.

Your App Store reviews are appreciated and encourage me to keep the updates coming.

Thank you for your support and I hope you continue to enjoy using CopyIt as much as I do."

Nigel Green - Lighthouse Software.

Preface

Loving to draw since early childhood, I first used the Grid Drawing Method in art class at primary school.

Over the years I have found it an invaluable tool for both drawing and painting.

With the introduction of the iPad on January 27th, 2010 I soon saw the potential of the device to be used for artistic purposes due to it's portability and large high resolution screen.

I had already released a few Apps on the iPhone and iPod touch by this time, so I had the knowledge and ability to jump right into creating a Grid Drawing App. Initially for the iPad only, CopyIt for iPad v1.0 was released in June 2010. The Universal version of CopyIt v1.3 followed later and was released in November 2010.

Since its initial release, CopyIt continues to this day to be the most feature-packed and useful Grid Drawing App available on the App Store.
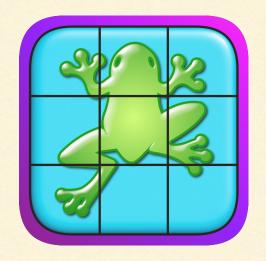
CopyIt For Kids was developed in 2012 in association with CopyIt - The Grid Drawing Method for iOS and CopyIt Legacy Edition.

Grid Drawing Lesson Plans

Group Activity

1

CopyIt For Kids

Age Group:	7 - 12
Group size:	2 - 48
Preparation time:	20 minutes
Activity time:	45 minutes

What you will need:

• An iPad with iOS 6.0 or later installed.

• The CopyIt For Kids App from your local App Store.

• A guillotine or scissors.

• A ruler.

• A calculator.

• Pencils and erasers.

• Square paper (must all be the same size) or paper that can be cut into squares.

• A printer.

Objectives:

• Transfer or enlarge an image by using the grid method.

• Gain an understanding of the concept of breaking an image into shapes and values to maintain proportion when copying.

• Learn observational skills.

Preparation: 20 mins

1. Find A Reference Image

If you don't yet have an image in mind, you can find plenty of images on the internet using the Safari web browser on the iPad.

Once you find a suitable one, touch and hold on the full-sized image (make sure it is not just the small thumbnail image) and save it to your Photo Album. It will then be available in CopyIt For Kids when you choose Load Photo.

You can also take a photo to use as a reference using the Take Photo button.

If your image or photo is in portrait orientation, you can rotate it in 90 degree increments using the Rotate button.

2. Turn On The Grid

Once you have either loaded a photo or taken a photo to use as your reference image, turn on the grid by touching the Grid button. This makes the grid size and grid color controls appear.

3. Choose A Grid Size

The grid size chosen should be based on the image complexity and the number of participants in the group.

There are two grid sizes in CopyIt For Kids.

4x3 = 12 grid squares
8x6 = 48 grid squares

4. Choose A Grid Color

The grid color you choose should depend on the major colors in your image or photo. Try out each grid color to see which one keeps the grid most visible.

5. Turn On Grid Numbers

This is recommended for younger groups, as the grid numbers make it quicker and easier to match up the final result at the end of the activity. To make the activity more advanced you could leave Grid Numbers off so that the last step is like putting together a jigsaw puzzle. In addition to showing where each grid square fits within the whole grid, the grid number is always in the top left corner of each grid square, so it also shows which way is up.

6. Save The Project

If you would like to do this activity again with another group you can save the project. This will save the current settings and reference image ready for you to load again later.

7. Print Out The Image

If you have an AirPrint enabled printer, you can print directly to the printer within CopyIt For Kids using the Print button.

To use any other printer, you will need to first use the email option in CopyIt For Kids and

send the grid image to a computer with access to a printer. You can then save and print the image attachment from there.

8. Cut Out The Squares

Printed Squares

Using the grid lines on the printed image as guides, cut out the grid squares using a guillotine or scissors.

Blank Squares

If using a single sheet for the entire grid, use a ruler to measure the height and width of the paper. Working from the top left, divide the height and width measurement by your chosen grid size and mark out each row and column with a pencil.

The squares must all be the same size but they can be any size you like. The larger each square is, the bigger the final piece will be once assembled. If you wanted to do a large wall mural for example, you could cut a square from an A4 or letter-sized paper to use as each grid square. This would however take 48 pages of paper for an 8x6 grid. For something smaller you could draw up the whole grid onto a single piece of paper.

The most important thing to remember is that each blank grid square must be the same size. You will need the same total of blank grid squares as your chosen grid size provides (either 12 or 48).

9. Allocate The Number Of Squares For Each Participant

When working out how many grid squares each participant will be responsible for, remember not to include those printed grid squares that are empty due to white space within the reference image.

It is recommended that each participant has one grid square each but if there is a requirement to have more due to the group size, you could allocate the grid squares based on how much detail is within each square. For example: one participant may get one grid square with a large amount of detail and another may get two grid squares with a medium amount of detail.

If there are any unallocated grid squares left over, you could offer them to the participants that finish their squares first or participate in the activity yourself.

CopyIt For Kids is available on the App Store.

If you have any questions please email us at:

support@lighthousesoftware.com.au

Activity: 45 mins

1. Distribute The Materials

Each participant will need at least:

1 x Pencil
1 x Eraser
1 x Printed Square
1 x Blank Square

2. Copy Each Square

Direct each participant to copy the contents of each printed square into a blank square.

If you are participating in the activity yourself, you could begin by talking about how you will start drawing yours and what questions you might ask yourself.

You could ask questions like where is the beginning of that line located within the square? Is it half way down or is it closer to a quarter way down?

As each participant completes their square, ask them to compare the printed square to theirs side-by-side to see if they are happy with the result. If not, they can erase that area and alter it if necessary.

3. Assemble The Final Result

Once all the blank squares have been completed, you can begin to assemble the final result on a piece of cardboard, a table, the floor or a wall. You can use the location of the grid number (always in the top-left corner) on the printed square to determine which way is up.

You could call up each participant in order by grid number or randomly.

If some grid contents do not match up exactly it is not essential. The reference image should still be easily recognizable.

CopyIt For Kids is available on the App Store.

If you have any questions please email us at:

support@lighthousesoftware.com.au