

Digital Cameras, School Newspaper and Podcasting!

Bring Tool Factory to your school for a digital camera workshop!

We'll conduct a hands-on staff development day in your computer lab and leave the cameras and software behind. This program typically qualifies for training grants. Contact Gordon Woodrow for details.

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Many more lesson plans are available at
www.toolfactory.com

Just click on the “Curriculum” button in the
banner.

Flash

Where do I find the flash settings? Look for the lightening bolt either on the back of your camera or in the menus. There are various flash settings on your camera but you'll need to be in picture taking mode to change flash settings. Flash settings include: "Flash Always On", "Flash Always Off", "Red-eye Reduction", and "Auto Flash" (the camera decides when to flash).

What is Red-eye? Red-eye is caused by the light reflecting off the inner surface of your eye. Using the red-eye flash setting gives an extra flash before it takes the picture causing your iris to close down and minimize the reflection. You can also bend down on one knee to take a picture causing the red eye reflection to travel above the camera's lens and minimize the problem. A hot shoe attachment separates the flash from the lens and also lessens the reflection.

Shooting Tips:

*When taking an important shot, take it first using "Flash Always On", then take it again using "Flash Always Off". One photo will inevitably be much better, but you won't know which one until you enlarge the photos on your computer.

Resolution

What is Resolution? Every photo is made up of pixels or dots. The more dots you have, the higher quality your photograph will be. If you multiply the number of pixels across the bottom by the number of pixels up the side of a photo, you'll have the total number of pixels in the photograph, also known as resolution.

Mega = Million, Pixel = Dots, Megapixel = Million Dots

2048x1536 Pixels = 3.1 Million Dots = 3.1 Megapixels

Higher priced cameras will have more megapixels. Cameras with higher megapixels allow you to print much larger images.

Once you find the resolution icon in the menus, use the arrow keys to change it to your needs. Shoot on lower resolution for photos in class projects or taking field trips. Use higher resolutions when you intend to print your photos for the yearbook or framing.

Shooting Tips:

*Lower resolution photos take up less space on the memory card so you can take more photos.

*Lower resolution gives you smaller file sizes-images will travel faster across email networks and you will have faster computer performance in older computers.

*Only use the highest resolution when you are planning to print a photo. This way you will save space on your memory card.

*You can always reduce the quality level of a picture, but you can never increase it!

Macro and Super Macro

What is Macro? Macro means close-up, and a good macro feature has the ability to turn your camera into a mini-microscope. The Macro icon looks like a flower and it will typically be located on the back of the camera, or in the menus. Use your arrow keys to toggle it on and off. Macro mode lets you hold the camera as close as eight inches (20 cm) from the subject. The flower icon will appear in the monitor in Macro mode.

What is Super Macro? Olympus cameras are equipped with Super Macro mode which lets you get as close as one inch (2 cm) from the subject. Super Macro photography requires more light than regular shooting. Don't use your viewfinder when shooting Super Macro photos! The viewfinder is slightly offset from the camera's lens, so you'll miss the shot.

Shooting Tip:

*Don't forget to turn macro off after you finish shooting, otherwise your normal shots will be blurry!

Optical and Digital Zoom

What is Zoom? Zoom allows you to get closer to your subject by way of the camera. There are two types of zoom, digital and optical. To determine the total range of the zoom for your camera, multiply together the strength of each type of zoom. For example: 3x optical zoom combined with 4x digital zoom = 12x zoom. A zoom lens is a lens of variable focal length. A 3:1 ratio is most common in a digital camera.

What is Optical Zoom? Optical Zoom is a zoom that is accomplished through the camera's glass lens. Picture quality will be consistently high throughout the range of the optical zoom. Optical zoom uses a multi-focal lens to "zoom" in on an image like a telescope. Think glass.

What is Digital Zoom? Digital Zoom is accomplished mathematically by stretching a small number of pixels across a large area. It digitally magnifies the center of the image by interpolating it, resulting in less sharpness. Remember when you stuck Silly Putty to a newspaper and then stretched it out? The more you stretched the image, the more the quality of the image deteriorated. Digital zoom does exactly that-it reduces the quality of the image. If you are shooting at high resolution, you may not notice the quality loss, and you'll be thankful for the extra zoom boost.

Shooting Tips:

*If zoom is important, budget for better optical zoom, but don't pay extra for digital zoom.

*Digital zoom will cut your resolution in half, making your image less clear.



You're the Editor

Grade: 3-5

Subject(s): Writing

Required products: Tool Factory Word Processor Materials

Tool Factory Workshop

Overview

A draft of a newspaper article is presented on a worksheet with a series of grammatical errors, such as run-on sentences and mistakes in capitalization, comma use, punctuation and spelling. Students will use the spell check and word processing features of Tool Factory Workshop to edit and/or retype the article. Then, they create an appropriate headline for the article and reformat the article's layout. Instructions

- 1) Open the "Rough Draft" worksheet in Tool Factory Worksheet.
 - 2) Direct students to edit the text of the article, correcting as many grammatical and spelling errors as possible. They should use the spell checker, but remind students to check for the misuse of homonyms that will not be caught by the spell checker.
 - 3) Have students change the color of the text they have edited to blue.
 - 4) Once you have checked the student's work, instruct him/her to change the color of the entire article to the color of his/her choice.
 - 5) Students then change the headline to one that gives readers a good idea of what the article is about, making sure the headline is an attention-grabber!
 - 6) Different pictures from the bank or hard drive can be added. Students can type in descriptive captions under each picture.
 - 7) Students add a byline with the name of the town from which the article is being reported, the date, and their name.
 - 8) Remind students to save their work. Follow-up Activities
- Students write their own newspaper or magazine article about a topic of their choice. Use a digital camera to take pictures. They edit and revise the article, then add appropriate images as illustrations.

Download Worksheets and Templates here: <http://www.toolfactory.com/cgi-bin/gencur.py?page=plan&pid=1&subject=6>

Getting Started Tool Factory Podcasting

Step 1: Give your podcast a name and brief description.

Step 2: Add an episode to your podcast and write a brief description.

Step 3: Create chapters for your episode to segment and organize the information.

Step 4: Type or paste your text into the script area. Enter the names of

the actors. Then high-light the text and click the actor's speech bubble to assign your text. The script will be automatically color-coded for you!

Step 5: Record your script, edit, and add music.

Step 6: Publish your episode.

Step 7: Subscribe to your podcast in iTunes for automatic downloads of new episodes!



Podcasting Ideas

- **School newspaper** - for parents and community members.
- **Class projects** - record stories or write reports.
- **School songs** and anthems.
- **Reviews** - of books, films, poetry, art, and music.
- **Interviews** - with sports stars and local heroes.
- **Reenactments** - of historical or fictional characters.
- **Compositions** - live music, school concert or play.
- **Diaries** - personal, fictional, or historical.
- **Lectures** - for absent students or study notes.
- **Homework** - vocabulary, spelling lists, or quizzes.
- **Stories and poems.**
- **Theatre** - dramatisations and role plays.
- **Reading intervention** - record monthly progress.

More Information and Download 30 Day Trial:

<http://www.toolfactory.com/products/page?id=2121>