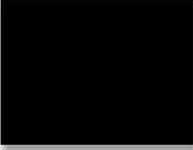
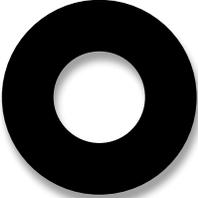
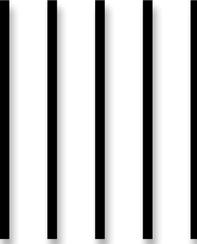
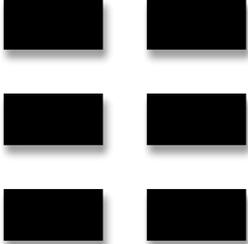
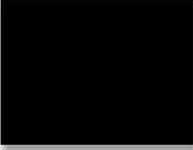
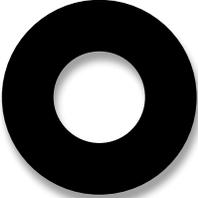
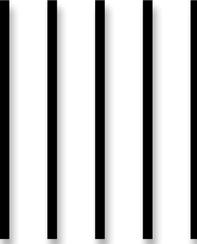
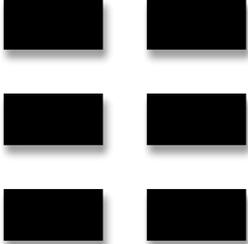
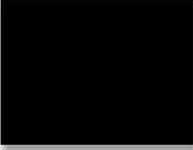
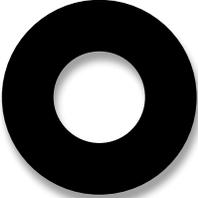
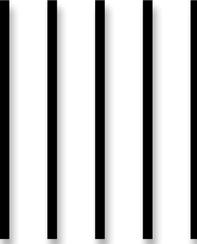
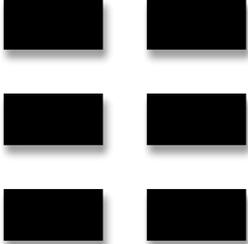


## Good Instructions

<b>Clear</b>	<ul style="list-style-type: none"> <li>• Students must all understand what you are asking them to do.</li> <li>• If they do not understand, they will not do it the way you want, or they will not do it at all.</li> </ul>
<b>Specific</b>	<ul style="list-style-type: none"> <li>• If you want students to write a paragraph that is 6 sentences long, then you must tell them that you want them to write a paragraph that is 6 sentences long.</li> <li>• If you simply say – write a paragraph, you will get paragraphs ranging from a single sentence to book length.</li> <li>• Also, understand that students in elementary and middle school cannot simply do things like – discuss. What should they discuss? How should they discuss? Who should they discuss with? Why should they discuss?</li> </ul>
<b>Repeated</b>	<ul style="list-style-type: none"> <li>• It is useful to have directions in multiple ways like written on a handout and read aloud by teacher as students follow along.</li> <li>• If the instructions are complex, you will have to repeat yourself and make sure at least a bulk of the students understand and can start while you trouble shoot with others.</li> <li>• However, make sure that if it is a direction that students can figure out on their own (ie – a classroom procedure), you let them do so             <ul style="list-style-type: none"> <li>○ For example – if the classroom routine is for students to turn work into a particular folder and a student asks which folder to turn work into, you answering that student increases their learned helplessness.</li> <li>○ I like – think in your brain...ask a friend...look it up...now ask me.</li> </ul> </li> </ul>
<b>Routine</b>	<ul style="list-style-type: none"> <li>• The more consistency you have in your classroom, the better – that includes routines and positive habits.</li> <li>• If you have a lab routine, then you should make sure you follow it so that instructions become easier and easier to follow as students get used to the routine.</li> </ul>
<b>Modeled</b>	<ul style="list-style-type: none"> <li>• Modeling enables students to see exactly what you expect them to produce. Sometimes our words are unclear, but visuals can speak volumes. It isn't cheating to provide students with an example of what you want their work to look like. When you provide a model, you are simply providing a guide for them to use as they work.</li> <li>• You can show examples of good models and of “models” you want students to avoid. You can even have students evaluate the legitimacy of each model.</li> <li>• How to Model: take students through particular steps; create a physical visual example; model a skill or process; show students how to use a particular tool; make sure students can see (and interact with if necessary) any model you show them; provide instructions as you use your example to demonstrate how students can follow instructions.</li> </ul>
<b>Practiced</b>	<ul style="list-style-type: none"> <li>• Providing good instructions takes practice</li> <li>• It requires you to have a complete grasp over the assignment you created and over what you want the students to do.</li> <li>• You need to understand your students, specifically in terms of age, skill level, language literacy, and ability to listen, adapt, and solve problems on their own.</li> </ul>
<b>Prior</b>	<ul style="list-style-type: none"> <li>• Make sure that you provide instructions (clear, specific, repeated, routine, modeled, and practiced) before students begin an assignment.</li> <li>• Make sure you have their attention before you give instructions.</li> <li>• Try not to interrupt an activity with additional instructions. If you have to, reset attention before speaking.</li> </ul>

## Providing Instructions

<p><b>Purpose</b></p>	<p>Here is what we are doing</p>	<p>Today, we will be using what we know about bird flight to create paper birds and measure their flight capabilities.</p>								
<p><b>Process</b></p>	<p>Here is how it will work – the steps you will take</p>	<ul style="list-style-type: none"> <li>• First, what I want you to do is examine the control design I made.</li> <li>• You are going to create your own design with the same size sheet of paper</li> <li>• You are going to fill out this chart (hold up but don't hand out yet) while you build.</li> <li>• On this chart, you need to record observations and note each change you make to your plans.</li> <li>• Here is an example of my design and how I filled out my chart</li> <li>• The supply table, up here, has beads, wire, straws, and cardstock that you can use in your designs.</li> <li>• You will have 30 minutes to work and try your designs on the runway.</li> </ul>								
<p><b>Tools</b></p>	<p>Here is where you can get supplies and how you can use them</p>	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 5px; width: 25%;">Beads</td> <td style="border: 1px solid black; padding: 5px; width: 25%;">Wire</td> <td style="border: 1px solid black; padding: 5px; width: 25%;">Straws</td> <td style="border: 1px solid black; padding: 5px; width: 25%;">Cardstock</td> </tr> <tr> <td style="text-align: center; height: 100px;">  </td> <td style="text-align: center; height: 100px;">  </td> <td style="text-align: center; height: 100px;">  </td> <td style="text-align: center; height: 100px;">  </td> </tr> </table> </div> <p>Organize your supplies and put them in an easily accessible space</p>	Beads	Wire	Straws	Cardstock				
Beads	Wire	Straws	Cardstock							
										
<p><b>Practice</b></p>	<p>This is your time to work and produce the deliverable</p>	<p>Students follow instructions while you walk around and troubleshoot. Try not to interrupt students with more instructions once they have started working. If you absolutely have to interject with an important instruction, you need to ask them for eyes and ears and wait for complete attention and quiet before you give the additional instruction.</p>								
<p><b>Deliverable</b></p>	<p>This is what I want you to accomplish</p>	<p>Model the final product for students and provide a clear idea of what you expect them to produce. Make your instructions clear, concise, and thorough. Ask for questions at the outset so that you make sure everyone is on the same page.</p>								

## Creating Handouts

<b>Purpose of Handouts</b>	<ul style="list-style-type: none"> <li>• Handouts can serve as illustrations, as reminders, homework assignments, and instructions.</li> <li>• Use handouts to enhance not clutter or distract</li> </ul>
<b>Fill the Entire Page</b>	<ul style="list-style-type: none"> <li>• Why wouldn't you??</li> <li>• Make it worth the students' time and effort</li> <li>• Middle school students write big. They need room to express their ideas.</li> <li>• Word allows you to set the margins.</li> <li>• Use Insert – Section Break to adjust margins on one page while leaving the others in the document the same.</li> </ul>
<b>Use color only for a purpose, not because it is fun</b>	<ul style="list-style-type: none"> <li>• Using color isn't for catching students' attention, it is for demonstrating a particular concept.</li> <li>• Use color to group like concepts or demonstrate contrast.</li> </ul>
<b>Provide Structure</b>	<ul style="list-style-type: none"> <li>• Students are not great at organization and note taking.</li> <li>• Make your handouts useful to them in multiple ways             <ul style="list-style-type: none"> <li>○ As a way to demonstrate specific content</li> <li>○ As a way to demonstrate how to take notes or organize information</li> </ul> </li> <li>• Make your handouts a model of how students can organize their own thoughts when working independently.</li> </ul>
<b>Provide Consistency</b>	<ul style="list-style-type: none"> <li>• Example: The lab sheet should always look the same</li> <li>• If you change it every time, the students will get confused.</li> <li>• Students need consistency – whatever habit or routine you start with, that is what they will do. It is difficult to break habits once formed.</li> </ul>
<b>Tweak and Reuse</b>	<ul style="list-style-type: none"> <li>• Think about how a handout you create can be tweaked and reused for other assignments or subjects.</li> <li>• See what other teachers are using. Can you tweak those handouts for your own students and purposes?</li> </ul>
<b>Student Ideas</b>	<ul style="list-style-type: none"> <li>• Provide space for students to create their own ideas or take notes</li> <li>• See how students use your handouts – did they do what you expected? If not, how can you tweak for next time?</li> <li>• If they used the sheet in an unexpected but positive way, can you utilize their idea to alter your next handout?</li> </ul>
<b>Clear, readable instructions</b>	<ul style="list-style-type: none"> <li>• If directions aren't on there, or clear, students will go home and forget what they are supposed to do.</li> <li>• On the flip side, too many instructions will confuse students.</li> <li>• Be specific – write a paragraph is too vague. Write a 5 sentence paragraph is specific.</li> </ul>
<b>Provide a Model</b>	<ul style="list-style-type: none"> <li>• If you expect a student to write, illustrate, or create something using what you have given them, then you need to show them what you expect.</li> <li>• Fill in your own handout and walk students through how you did it and what you included.</li> </ul>