

Database Skills

	Primary Projects		Junior Projects			Intermediate Project	Senior Project
	Cop	Celebrate	Clue	Quest	Mummy	NASA	Planner
ABOUT TABLES							
view records in a table				•		•	•
enlarge the column width in a datasheet						•	•
create a table using in Design View or using the Table Wizard						•	•
make an input mask for phone numbers, date, and time fields						•	•
set primary keys						•	•
set appropriate data type for each field						•	•
add a default value to a field							•
create a lookup column for a field							•
set the field size for a field							•
spell check the content of a table							•
MAKE A DATABASE							
change viewing modes						•	•
create a blank database						•	•
determine data inputs and outputs for a database						•	•
enforce referential integrity							•
establish table relationships							•
ABOUT REPORTS							
create a report in Design View or using the Report Wizard						•	•
add objects to a report						•	•
sort fields alphabetically in a report						•	•
group data in a report						•	•
preview and print a report						•	•
insert page numbers onto a report							•
use report sections including headers, footers, and details							•
resize the report area							•
ABOUT QUERIES							
create a multi-table select query							•
place fields onto the query grid from the displayed field list							•
show tables to be used in a query							•
specify criteria in a query							•
save a query							•
merge data in a query with Microsoft Word							•

Animation Skills

Senior Project
Flash

BASIC SKILLS	
create a document	•
label the parts of the Flash program	•
open and close a document	•
save a document	•
UNDERSTAND ANIMATION	
calculate how long a document will play based on the frames per second	•
define animation	•
define frame by frame animation	•
define motion path animation, motion guide layer, guide layer, and guided layer	•
define shape tween, motion tween, tweening	•
identify a frame by its number	•
identify the name of the layer	•
list the benefits of using the computer to create animation	•
recognize the difference between a motion and shape tween	•
recognize the difference between frame by frame animation and a motion tween	•
understand how the Flash program can be used to create animations	•
understand the difference between a blank keyframe and keyframe	•
understand the history of animation and how the computer has changed animation	•
ABOUT VIEWING ANIMATION	
view the movie or scene in the preview window	•
view the animation using the ENTER key	•
select a scene to view using the <i>Edit Scene</i> tool	•
view the stage in onion skin view	•
EDIT THE CONTENT AND LAYOUT	
use spell check to correct errors	•
insert, rename, and delete scenes in a document	•
insert, delete, and reorder layers within a scene	•
copy, paste, and reverse frames in the timeline	•
cut and paste objects on the stage	•
paste an object in the same position on the stage as the copied item using Paste in Place	•
select, insert, and remove a frame in the timeline	•
ABOUT OBJECTS	
add words using the Text Tool	•
adjust the effects for a sound to make it fade in	•
adjust the paint mode to fill different areas with color using the Brush Tool	•
break apart an object to divide it into editable parts	•
change a gradient by adjusting the colors using the Gradient Transform Tool	•
change the Pencil type by making a selection from the Options pane	•
clear the stage using the Selection Tool and the DELETE key	•
copy a color by clicking on the desired color on the stage with the Eyedropper tool	•
copy and paste an object	•

Animation Skills

Senior Project
Flash

create a new graphic based on a symbol	•
delete an object from the stage using the DELETE key	•
draw a line, oval, and rectangle	•
draw a polygon or zig zag shape using the Pen Tool	•
draw freehand using the Pencil Tool or Brush Tool	•
edit the individual points of a shape using the Subselection Tool	•
erase a drawing using the Eraser Tool and its options	•
fill an object with color using the Paint Bucket Tool	•
fill the stroke of an object with color using the Ink Bottle Tool	•
format the text by adjusting the font, font size, and font color in the properties panel	•
group together multiple objects	•
group together the stroke and fill of an object	•
increase or decrease the size of magnification with the Zoom Tool	•
modify the appearance of a grouped object in the editing pane	•
modify the stacking order of objects	•
move the stage within the window using the Hand Tool	•
move, bend, and reshape an object using the Selection Tool	•
paste an object in the same position as the copied image using Paste in Place	•
select a portion of the stage using the Lasso Tool	•
select a stroke and fill color using the Stroke Color Tool and Fill Color Tool	•
select the brush size and shape from the Options pane	•
select the stroke color, stroke width, stroke style, and fill color from the properties panel	•
stream a sound clip	•
transform an object by rotating, skewing, or scaling the shape with the Free Transform Tool	•
ungroup an object	•
ABOUT ANIMATION	
add content to a blank keyframe	•
animate an object to follow a motion path	•
animate an object using frame by frame animation	•
change from one color to another using a shape tween	•
draw a motion path	•
insert a keyframe and blank keyframe	•
insert a motion guide layer	•
morph one shape into another using a shape tween	•
move an object from one position to another using a motion tween	•
orient an object to the motion path	•
ABOUT FORMS OF OUTPUT	
export a document as a Flash movie	•
select export settings for a movie clip	•
ABOUT IMPORTING ITEMS	
convert an object into a symbol and add it to the library	•
create a movie clip and place it into the library	•
import a sound into the library	•
insert a graphic, movie clip, or sound from the library into the timeline	•
insert a sound from the library into the timeline	•

Multimedia Skills

	Primary Projects		Junior Projects					Intermediate Projects			Senior Project	
	City	Animal	Hero	Clue	Images	Movie	Quest	Drama	Novel	Travel	CEO	Commercial Specialist
BASIC SKILLS												
open and close a multimedia file	•	•	•	•	•	•	•	•	•	•	•	•
create a multimedia file	•	•	•	•	•	•	•	•	•	•	•	•
save a multimedia file	•	•	•	•	•	•	•	•	•	•	•	•
VIEWING MULTIMEDIA												
play, pause, stop, rewind, or fast forward a multimedia file	•	•	•	•	•	•	•	•	•	•	•	•
play a specific portion of a multimedia file	•	•	•	•	•	•	•	•	•	•	•	•
preview the multimedia file in various views	•	•	•	•	•	•	•	•	•	•	•	•
EDIT CONTENT AND LAYOUT												
add or delete text	•	•	•	•	•	•	•	•	•	•	•	•
use spell check to correct errors		•			•					•		•
insert and delete slides or clips in a multimedia file			•	•	•	•		•	•	•	•	•
reorder slides or clips within a multimedia file			•			•			•	•		•
autofit text to the placeholder							•					
copy and paste an object, slide, or clip									•		•	
use and edit a master slide										•		•
promote and demote text within a slide										•		•
delete unwanted frames in a video clip								•				•
isolate a frame in a video clip								•				•
split a clip into two pieces								•				•
place video clips into a storyboard								•				•
ABOUT FORMATTING												
apply a pre-set slide design	•	•	•					•		•		
format the font, size, style, color, and alignment of text	•		•	•		•		•	•	•	•	•
choose an appropriate slide layout: title, organizational chart, chart, object, bulleted lists, or blank		•	•	•	•	•			•	•	•	•
add a background to a slide: color, texture, pattern, gradient, or picture				•	•	•			•		•	•
add a screen tip							•					
change the type of bullets in a list										•		•
add a header and footer to a slide										•		•
adjust line spacing of text within a slide										•		
ABOUT OBJECTS												
add or delete clip art, picture files, word art, animated clips, and text overlays	•	•	•	•	•	•	•	•	•	•	•	•
resize and move an object	•	•	•	•	•	•	•	•	•	•	•	•
adjust object order	•								•		•	
insert and play an audio file	•			•				•	•	•	•	•
create and format tables within a slide			•						•	•		•
insert and play a video file in a multimedia program			•			•			•		•	•
create and format organizational charts			•								•	
group objects											•	
rotate or flip an object							•		•	•	•	•
draw and format drawing objects: fill, line style, line width, and effects							•		•	•		
crop an object									•			•
align objects									•			
insert a hyperlink to a slide or website									•	•		•
edit a clip art object									•			
select an item or a portion of an object to become transparent									•			•
adjust the color control of an object												•
add action buttons												•
ABOUT EFFECTS												
add an animation scheme to objects	•	•		•					•			•
add and remove transition effects	•	•				•		•	•	•		•
add customized animation effects to objects							•		•	•	•	•
narrate the events								•				•
add text overlays and select an animation									•			•
apply video effects									•			•
rehearse timings for a slide presentation							•			•		
ABOUT FORMS OF OUTPUT												
print a multimedia file as a handout	•	•		•			•		•	•		•
save a multimedia file in a format appropriate for posting to a website			•		•			•		•		•

Multimedia Skills

	Primary Projects		Junior Projects						Intermediate Projects			Senior Project	
	City	Animal	Hero	Clue	Images	Movie	Quest	Drama	Novel	Travel	CEO	Commercial	Specialist
save a multimedia file as a picture file			•										•
add and print notes in the Notes pane			•		•	•							
save a multimedia file for a CD or as a "pack and go"							•	•	•			•	
use on screen navigation tools during a presentation										•			•
save a multimedia file as a video and set the quality								•				•	
save a presentation as a kiosk													•
use the pen during a presentation													•
USING MULTIMEDIA EQUIPMENT													
capture a video using digital recording equipment			•			•		•		•		•	•
take photos using a digital camera				•	•	•		•				•	•
speak into a microphone to record voice						•	•	•				•	•
set the microphone settings for recording						•	•	•				•	
adjust the camera settings to boost the color and light								•				•	
change the frame rate to increase the smoothness of the video								•					•
position the camera to take different types of shots at various angles, and with different movements								•					•
ABOUT IMPORTING ITEMS													
insert slides from a file							•						
import text from Microsoft word							•						
import a Microsoft excel chart											•		

Programming Skills

	Primary Project		Junior Projects		Intermediate Projects		Senior Projects	
	PC	Explorer	Link	Web	HTML	Designer	Specialist	
BASIC SKILLS								
understand that a computer uses programmed instructions to run	•	•	•	•	•	•	•	•
understand the purpose of source code		•	•	•	•	•		
view source code		•	•	•	•	•		
examine the source code of a web page to locate specific code				•	•			
decode simple code fragments					•			
define binary code and explain how it relates to the computer								•
translate letters into binary code								•
WRITE CODE								
convert a document into an html file			•	•	•			
add a hyperlink using the appropriate html tag				•	•			
sequence a series of commands in logical order				•	•			
create a web page using html coding language					•			
title the web page using a title html tag					•			
add a heading to the web page using a header html tag					•			
format text using paragraphs and line breaks using html coding					•			
align text to the left, right, or middle using html coding					•			
alter the font size using html coding					•			
apply styles to font using html coding					•			
insert a rgb code to change font colour					•			
add a picture using the img src html tag					•			
include alternate text to describe the picture using the alt html tag					•			
align text to wrap around an image using html coding					•			
add a horizontal rule using the appropriate html tag					•			
change the background of a web page using a rgb code					•			
add a meta tag for keyword, author, and description					•			
EDIT CODE								
debug program design				•	•			
edit html code fragments				•	•			

Spreadsheets Skills

	Junior Projects		Intermediate Projects			Senior Projects	
	Biz	Sales	Entrepreneur	Investor	CEO	Venture	Consultant
UNDERSTANDING SPREADSHEETS							
define terms: workbook, worksheet, cell, row, and column	•	•	•	•	•	•	•
explain the function of a spreadsheet	•	•	•	•	•	•	•
label the parts of the spreadsheet window	•	•	•	•	•	•	•
BASIC SKILLS							
enter text, dates, and numbers into cells	•	•	•	•	•	•	•
select a cell, row, or column	•	•	•	•	•	•	•
select adjacent and non-adjacent cells, rows, or columns	•	•	•	•	•	•	•
save a workbook to a specific location	•	•	•	•	•		•
open and close a spreadsheet application	•	•	•	•	•		•
use a template	•	•	•		•		•
move between worksheets in a workbook	•	•	•		•		•
create a new spreadsheet	•	•		•		•	•
ABOUT CELLS							
align cell contents in a selected cell range	•	•	•	•	•		•
format data in a cell: font, font style, font size, fill color	•	•	•	•	•		•
insert objects onto a worksheet: picture, clipart, and word art	•				•		•
merge cells	•	•	•		•		•
format cells to display numbers as currency or a percent		•	•	•		•	•
format borders in a selected cell range		•		•	•	•	•
autoformat a selection of cells				•	•		•
adjust text orientation in a cell					•		•
wrap text within a cell					•		•
increase the number of decimals displayed in a number		•					•
name cell range(s) in a worksheet							•
add a comment to a cell							•
ABOUT GRAPHS AND CHARTS							
produce different types of charts and graphs	•	•	•	•	•		•
modify the chart or graph: colors, title, labels, scale, legend	•	•	•	•	•		•
add a trendline to a graph				•			
change the chart type		•					•

Spreadsheets Skills

	Junior Projects		Intermediate Projects			Senior Projects	
	Biz	Sales	Entrepreneur	Investor	CEO	Venture	Consultant
ABOUT PRINT OPTIONS							
print a worksheet, a selection, or a pre-defined cell range	•	•	•	•	•		•
modify document settings: orientation, margins, scaling, area		•		•	•		•
print preview a worksheet		•		•	•		•
add a custom header and footer to a worksheet					•		•
insert or remove a page break				•	•		•
ABOUT FORMULAS							
automatically sum columns and rows using <i>autosum</i>	•	•		•	•	•	•
use basic arithmetic formulas		•	•	•	•	•	•
troubleshoot the meaning of an error message in a cell		•	•	•	•	•	•
use conditional formatting options based on a formula				•			•
use statistical functions such as average, min, max, and count		•			•		•
use the financial function pmt							•
ABOUT EDITING AND ARRANGING DATA							
delete cell contents in a selected cell range	•	•		•			•
insert or delete selected rows or columns		•			•	•	•
insert, delete, or rename worksheets		•			•		•
modify column width and row height		•	•	•	•	•	•
use the <i>autofill</i> tool to copy increment data entries		•	•	•	•	•	•
copy the formatting from one cell to another					•		•
copy cell contents and paste onto the same or different worksheet				•	•		•
copy selected data from a worksheet in the form of a picture							•
ABOUT ANALYZING AND SUMMARIZING DATA							
sort data in ascending or descending order	•	•					•
filter data to display data that meets a specific criteria							•
produce a pivot table and chart							•
perform a what-if analysis							•
produce a <i>scenario summary</i> that graphs a what-if analysis							•
perform single and multi-level sorts							•
ABOUT VIEWS							
change worksheet view		•		•	•		•
hide or unhide columns							•

Telecommunication Skills

	Primary Projects		Junior Projects						Intermediate Projects						Senior Project				
	Artist	Animal	Explorer	Hero	Reporter	Quest	Correspondent	Link	Mummy	Web	Novel	Ezine	Investor	Travel	Biography	Journalist	HTML	NASA	Designer
ETHICAL AND SAFE USE OF THE INTERNET																			
demonstrate appropriate on-line behavior	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
understand and follow the rules for internet safety	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ethically use information found on the internet	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
evaluate the quality of information found on the internet		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
understand the importance of keeping user information private			•					•		•					•		•		•
cite the source for data gathered from the Internet					•	•	•								•	•			•
ABOUT THE WORLD WIDE WEB																			
browse a web site using hyperlinks	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
display a specific web page by typing in a URL	•		•			•	•	•	•	•	•	•	•	•	•	•	•	•	•
display a specific web page using a bookmark		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
save a picture or media object on a web page		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
use keywords in a search		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
explain the purpose of a search engine			•					•		•						•			•
compare the difference between search engines			•					•		•									
learn about a topic from information posted on a web site					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
copy elements of a web site					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ABOUT MICROSOFT INTERNET EXPLORER																			
open and close a web browser	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
use the tools on the Microsoft Internet Explorer Standard toolbar			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
bookmark a web page			•					•		•									•
organize bookmarked websites using folders			•					•		•									•
view html source code in a web browser			•					•									•		•
set the home page for a web browser								•											•
ABOUT THE INTERNET																			
explain how a web page is viewed on a computer			•					•		•							•		•
define internet terminology			•		•			•		•							•		•
describe a brief history of the internet			•					•									•		•
describe how telecommunications have changed society			•					•		•		•					•		•
know the structure of a web address			•					•											•
view the speed of the Internet connection			•																•
explain the role of a web designer								•		•							•		•
identify the purpose of a meta tag										•							•		•
CREATE AND UPLOAD A WEB SITE																			
create a web site				•	•			•		•				•	•		•		•
upload a web site to the world wide web				•	•			•		•					•		•		•
follow registration process for free webhosting				•	•			•		•					•		•		•

