Student name:\_\_\_\_\_\_\_\_\_\_

1. A closed figure composed of *x-y* coordinates is called a\_\_\_\_\_\_\_\_\_.

polygon

feature class

line or polyline

point

1. A figure composed of ordered *x-y* coordinates with two endpoints is called a\_\_\_\_\_\_\_\_\_.

polygon

feature class

line or polyline

point

1. A feature composed of a single *x-y* coordinate is called a\_\_\_\_\_\_\_\_\_.

polygon

feature class

line or polyline

point

1. A raster portraying a\_\_\_\_\_\_\_\_\_ is an example of continuous data.

road map

political party map

land use map

precipitation map

geology map

1. Data that has been tied to a specific location on the earth's surface is said to be\_\_\_\_\_\_\_\_\_.

attributed

discrete

georeferenced

featured

continuous

1. The basic element of data storage in a raster is called a\_\_\_\_\_\_\_\_\_.

coordinate

cell

pixel

either cell or pixel

either coordinate or pixel

1. Choose ALL of the following rasters which would be considered to be discrete data rather than continuous data.

slope

rainfall

soil type

vegetation type

temperature

1. A data construct that contains information about spatial features, such as the name or population of a state feature, is known as a\_\_\_\_\_\_\_\_\_.

table

cell

feature class

polygon

raster

1. When a data set is placed into a map, it is called a\_\_\_\_\_\_\_\_\_.

feature class

layer

table

view

polygon

1. You are planning a hike. You measure the trail on a 1:24,000 scale map and discover that it is 30 cm long. How long is the hike in kilometers?

0.4 kilometers

0.7 kilometers

4.0 kilometers

7.2 kilometers

72 kilometers

1. The State of South Dakota would look largest if shown in a map at which of the following scales?\_\_\_\_\_\_\_\_\_

1:1 million

1:5 million

1:20 million

1. You measure a soccer field (100 meters long) on an air photo and find that it is one centimeter long. What is the scale of the photo?

1:100

1:1000

1:10,000

1:100,000

1:1,000,000

1. Which one of the following statements is NOT true?

A 1:1 million scale map of faults in all of California should not be used to determine which parcels in the city are crossed by the fault.

The accuracy of a GIS analysis is determined by the least accurate data set included in the analysis.

Although it is possible to display a 1:1000 and a 1:1 million scale map together in a GIS, it is often not advisable to do so.

Users should always try to use the highest resolution data available regardless of the scale of the project being done.

1. The scale of a map changes when\_\_\_\_\_\_\_\_\_.

The user copies the data set to a new file.

The user pans to a different map location.

The user zooms in or out.

The user turns the layer visibility on or off.

The user chooses a different color to display a layer.

1. Individual parcel polygons would be most likely to be displayed on a\_\_\_\_\_\_\_\_\_.

small-scale map

medium-scale map

large-scale map

1. If you were looking in ArcGIS Online for elevation data, you would be trying to find a(n)\_\_\_\_\_\_\_\_\_.

map layer

image layer

feature layer

geoprocessing service

1. The original scale from which a data set was developed is known as the\_\_\_\_\_\_\_\_\_.

map scale

reference scale

display scale

source scale

fish scale

1. Programs and devices that access data and services over Internet connections are called\_\_\_\_\_\_\_\_\_.

clients

geographic information systems

servers

clouds

webcrawlers

1. Which one of the following statements is true?

Cloud services are open and free to all users.

GIS servers are now commonly used in the place of data clearinghouses.

GIS servers are simple and cheap to set up and maintain.

GIS systems are hardwired to use only data sources on a local hard drive.

1. Which one of the following statements does NOT describe a function of the cloud?

It provides rapid deployment and scalability of servers.

It provides data storage that can be accessed by multiple devices located anywhere.

It is more secure than a local network for storing highly sensitive information.

It is utilized both by individuals and large corporations.

1. Data quality is defined as:

whether or not a data set is completely correct.

the resolution at which the data are stored.

the fitness of data for a given purpose.

the scale at which the data are stored.

1. Information about a data set, such as who created it and why, is called\_\_\_\_\_\_\_\_\_.

attribute data

spatial data

metadata

feature data

aspatial data

1. John is testing an expensive pH meter that records data to four decimal places, although most report data to two decimal places. Unfortunately it has been left in a hot car for two days and is giving the wrong pH value for the test solutions he is using. If someone were to use this meter to take water pH measurements, then the measurements would be\_\_\_\_\_\_\_\_\_.

neither precise nor accurate.

precise but not accurate.

both precise and accurate.

accurate but not precise.

1. You have a feature class of schools. The attribute table contains the names of the principals but is several years old, and you are updating it to make sure that the data are current. You are dealing with what aspect of data quality?

resolution

thematic accuracy

geometric accuracy

precision

layer accuracy

1. Which type of scale term refers to the original scale map from which a feature class may have been digitized?

source scale

display scale

map scale

metric scale

1. You have two feature classes, one containing city roads and one containing county roads. Some roads are in both feature classes, but their locations are slightly different from each other. You are dealing with the data quality issue of\_\_\_\_\_\_\_\_\_.

precision

thematic accuracy

geometric accuracy

resolution

layer accuracy

1. Sally has a feature class of counties and a feature class of states, but the boundaries do not coincide exactly. These two data sets illustrate the data quality issue of\_\_\_\_\_\_\_\_\_.

thematic accuracy

resolution

precision

logical consistency

temporal accuracy

1. Citing the source of data used in a map or a report\_\_\_\_\_\_\_\_\_.

is only required if the map or report is being formally published

is a professional and ethical responsibility

can be omitted if the map uses only publically available data

can be replaced with the agency's logo on the map or report

1. What is the predominant purpose of formally citing a data source?

To allow someone to locate and potentially use the same data.

To give credit to the people or agency who developed the data.

To ensure that the data set is properly interpreted in the map.

To avoid losing points on an assignment.

1. The oldest program in the ESRI family of GIS products is\_\_\_\_\_\_\_\_\_.

Arc/INFO

ArcToolbox

ArcGIS

ArcGIS Pro

ArcView

1. When drawing layers in a map, the first layer drawn is the one at the\_\_\_\_\_\_\_\_\_ of the Contents pane.

bottom

top

middle

1. A project may contain\_\_\_\_\_\_\_\_\_ maps.

only one

only two

more than two

1. Which one of the following is NOT a program for distributing geospatial data over the Internet?

ArcIMS

ArcGIS for Server

ArcInfo Workstation

ArcGIS Portal

ArcGIS Online

1. In the ArcGIS family of products, the term extension refers to\_\_\_\_\_\_\_\_\_.

program modules that are licensed separately for an additional cost

a set of data products accessed over the Internet

functions that improve the accuracy and precision of data sets

the data resources available in ArcGIS Online

1. Which one of the ArcGIS family of products is most tightly coupled to ArcGIS Online?

ArcView

ArcMap

ArcGIS Pro

ArcInfo Workstation

ArcCatalog

1. Which one of the following GUI elements would NOT be found in a view?

a table

a map

a layout

a ribbon

a scene

1. The\_\_\_\_\_\_\_\_\_ is the place designated to store the GIS data associated with a project.

home geodatabase

Toolbox

Contents pane

folder connection

map

1. What is the purpose of a folder connection in a project?

To remember where the project folder is located.

To access the home geodatabase.

To access information from an Internet portal.

To save a shortcut to data folders used by the project.

To provide a channel to share data to ArcGIS Online.

1. Using tools to execute specific tasks with spatial data in ArcGIS is known as\_\_\_\_\_\_\_\_\_.

geoprocessing

connecting

displaying

managing

promoting

1. In a tool, a parameter box marked with an asterisk\_\_\_\_\_\_\_\_\_.

must be filled in before the tool will run

is an optional parameter that may be left blank

indicates that the correct value is entered and the tool is ready to run

indicates an error that must be fixed before the tool is run

1. In a tool, a parameter box marked with a red x\_\_\_\_\_\_\_\_\_.

indicates an error in the parameter that must be fixed before the tool is run

indicates that the parameter must be filled in before the tool will run

indicates that the tool is ready to run

indicates an optional parameter that may be left blank

1. Before running a geoprocessing tool, the user must usually enter information needed by the tool, known as its\_\_\_\_\_\_\_\_\_.

connections

fundamentals

parameters

layers

vectors

1. Before running a tool for the first time, it is recommended that you\_\_\_\_\_\_\_\_\_.

save the map document

back up your hard drive

read the Help information

talk to your instructor

1. What does it mean if a layer's check box is dimmed?

The user has turned off the layer so it won't be displayed.

The layer has a display scale range set for it.

The data are currently unavailable for display.

The user has turned on too many layers and can't turn on any more.

1. The term "geoprocessing" refers to\_\_\_\_\_\_\_\_\_.

stringing together inputs and functions to solve a problem

calculating the correct *x-y* coordinates for a coordinate system

breaking down a data set into its component parts

performing calculations based on fields in a table

1. Select the definition of the term "raster".

a feature class in a geodatabase

a table containing attributes about features

a data set composed of an array of numeric values as cells or pixels

a spatial data storage method that uses points, lines, or polygons

1. Select the definition for the term "metadata".

data that take on a relatively small number of distinct values

information about map features stored in columns of a table

numeric measurements, such as elevation, that exist at every location of a map

information stored about data to document it

1. Select the definition of the term "attributes".

information about map features stored in columns of a table

data sets composed of an array of numeric values as cells or pixels

a list of the folders that must be traversed to locate a particular file

information stored about data to document it

1. Select the definition of the term "map".

an organized subset of feature classes in a geodatabase

a view holding layers that are displayed and analyzed together

a spatial data storage method that uses points, lines, or polygons

a data set composed of an array of numeric values as cells or pixels

1. Select the definition of the term "pixel".

the beginning and endpoint of a line feature

information about map features stored in columns of a table

a square data element in a raster holding one value for the map

stored *x-y* location; a group of them defines the shape of a line or polygon

1. Select the definition of the term "cell".

the beginning and endpoint of a line feature

stored *x-y* location; a group of them defines the shape of a line or polygon

a square data element in a raster holding one value for the map

information about map features stored in columns of a table

1. Select the definition of the term "vector data".

a file that points to spatial data and stores how to display it

a data set composed of an array of numeric values as cells or pixels

numeric measurements, such as elevation, that exist at every location of a map

a spatial data storage method that uses points, lines, or polygons

1. Select the definition of the term "continuous data".

map objects that occupy distinct locations or have a limited set of values

numeric measurements, such as elevation, that exist at every location of a map

information stored about data to document it

the range of scales for which a data layer will be displayed

1. Select the definition of the term "cloud".

a map view holding layers that are viewed and analyzed together

a link in ArcCatalog and ArcGIS Pro that points to a folder with GIS data

an Internet map layer in which the actual features are accessible

an Internet computing system that rents processing power and disk space

1. Select the definition of the term "discrete data".

map objects that occupy distinct locations or have a limited set of values

a square data element in a raster holding one value for the map

numeric measurements, such as elevation, that exist at every location of a map

stored *x-y* location; a group of them defines the shape of a line or polygon

1. Select the definition of the term "feature class".

a file that points to spatial data and stores how to display it

a data set composed of an array of numeric values as cells or pixels

a set of similar spatial objects with the same attributes stored together in a data file

a spatial object composed of one or more *x-y* coordinate pairs and a record in a table

1. Select the definition of the term "folder connection".

a link in ArcCatalog and ArcGIS Pro that points to a folder with GIS data

a set of similar spatial objects with the same attributes stored together in a data file

an organized subset of feature classes in a geodatabase

a file that points to spatial data and stores how to display it

1. Select the definition of the term "feature".

a spatial object composed of one or more *x-y* coordinate pairs and a record in a table

an old spatial data format created for, and used by, Arc/INFO

a square data element in a raster holding one value for the map

stored *x-y* location; a group of them defines the shape of a line or polygon

1. Select the definition of the term "scene".

map data displayed in three dimensions using surface elevations

a map used to display natural features such as forests or mountains

a formal map for printing that includes titles, scale bars, etc.

a specific layout of windows and panes specified for the Pro GUI

1. Select the definition of the term "web map".

a map that uses only GIS services and is readable by many devices

a map that includes GIS services as well as local data

a map containing networks, such as roads or utilities

a map that can only be accessed within ArcGIS Online

1. Select the definition of the term "project folder".

a Portal location containing useful data sets

a location on the local hard drive storing data used by a project

the folder containing the project file and home geodatabase

a place on a network drive that stores shared GIS data sets

1. Select the definition of the term "source scale".

the scale at which a data set was originally converted to digital form

the scale at which the map is currently displayed

the scale at which a layer appears or disappears

the scale of a layer when its entire extent is visible in the map

1. Select the definition of the term "logical consistency".

the extent to which the data correctly captures real-world relationships

the extent to which the *x-y* coordinates are correctly placed on the map

the extent to which the attribute fields contain correct information

the extent to which the time period of the data is valid

the extent to which the metadata are filled out

**Answer Key**Test name: chapter 1

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