Putting It All Together
There are many types of rock gardens and many ways to construct them. The general principles given here are primarily for a natural-looking rock garden on a natural or constructed slope. The principles of placing rocks and plants can also apply to flat areas or container gardens or raised beds. More detailed instructions for all types of rock gardens can be found in books or online.

Take your time planning and building your rock garden. If you make mistakes or change your mind, it will be very difficult to correct later.

Building the Site: Add earth to elevate flat areas or reshape slopes if necessary (make artificial slopes no higher than 4 ft for the most natural look).

Amend the soil if necessary. What you add will depend on existing soil conditions and what you want to grow. Small rocks, sand, and sometimes organic matter are commonly added.

Placing Rocks: Place the largest rocks first at the bottom of the slope. Begin at the bottom and work up. Before placing rocks, observe how water runs down the slope. Rocks can then be positioned to redirect water or slow it down, helping to keep soil from washing away.

For the most natural look, use the same type of rock and place in the same orientation, with any layers running horizontally. Use a variety of sizes and place randomly. Bury at least 1/3 to 1/2 of the rock under the surface for stability and a natural look. In larger gardens, paths of flat stepping stones will allow easier access.

Always use care when moving and placing large rocks. Hire help or rent equipment if necessary. If having rocks delivered, have them placed as close to their desired location as possible, and above rather than below their final location - it’s easier to move rocks downhill than uphill.

Planting: Delay planting for at least several weeks to allow for settling. If there is no rain during that time, sprinkling the area will aid settling.

Planting in drifts and clumps will make your garden look natural - don’t scatter too many single plants around or plant in rows. If possible, before planting, set all your plants in place and then step back and look at the big picture.

Many rock garden plants may be slow to get established, and the garden may look bare for a few years. Be patient. Add a few annuals. Don’t overplant perennials or you will be dealing with increased future maintenance.

Maintenance
Weeds are the main problem in a rock garden, especially one with lots of open spaces. Make sure soil is weed free before planting, and mulch with small rocks or other material.

Water and fertilizer needs will depend on the type of plants you are growing. Most rock garden plants need fertilizing no more than once a year. Don’t overwater. Keep plants healthy and divide as needed.

In spring (or whenever necessary), fill in where soil has been washed away.

Clean up and remove fallen leaves and debris in fall.

Mulch after ground has frozen to prevent frost heaving in winter. Raised beds and containers may need extra protection in winter.

While you will see lots of information on what a rock garden is “supposed” to look like, it’s really up to you. If you like the appearance, the rocks are stable, the plants are doing well, and it’s easy to care for, that’s all that’s important. But if you want a rock garden that looks as if it was put there by nature, it’s best to follow the guidelines.

For more information on gardening please visit:
http://web.extension.illinois.edu/state/horticulture/index.php
or
call University of Illinois Extension Knox County Office 309-342-5108

Other information brochures can be found online at http://web.extension.illinois.edu/hkmw/hort.html

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What is a rock garden? In the broadest sense, it is simply using rocks in the garden. You can choose to emphasize either the rocks or the plants. A traditional rock garden is designed to look as if both the rocks and the plants were placed there by nature. A rock garden can be as simple or as elaborate as you desire and as your nature. A rock garden can be as simple or as elaborate as you desire and as your

Why a Rock Garden
- A rock garden can take advantage of natural conditions such as rocks and slopes
- Many rock garden plants are small. You can have a wide variety of plants in a small area.
- Rocks add shape, texture, and color to the landscape, and provide stability and four-season interest.
- A well-designed rock garden can add vertical interest and break up an expanse of flat lawn or planting beds.
- A rock garden can be incorporated into water features such as streams, ponds, or waterfalls.
- A rock garden can be low maintenance after initial construction.

Types of Rock Gardens
- Traditional or natural - looks as if it belongs there.
- Evoking a different place - Mediterranean, alpine, desert, Japanese, etc.
- Formal - geometric patterns, may echo architectural features.
- Gravel garden - a layer of gravel with a few rounded boulders of varying sizes scattered throughout. This is a good option for flat areas.
- Trough or container gardens

Choosing a Location
A gentle slope or uneven terrain is best. If you have an area that already has some rocks in the soil, that is ideal. If your yard is flat, you can construct a berm or gentle slope.

Most traditional rock garden plants prefer rocky, porous soil, with full sun and not too much moisture or fertility. Good drainage is the most important factor, especially in winter. However, you can find plants with the appropriate look that are suited to virtually any conditions. If you have heavy clay soil it may be best to build an 8-12" bed of loose soil on top of it.

Choosing Rocks
For the most natural look, use local stone and choose rocks of just one geological type. They will look like they belong together. Weathered rocks will look more natural than freshly quarried rocks. Look for rocks with pockets or crevices where you can place soil and plants.

Choosing Plants
Choose a variety of different sizes but consider size and weight. Large rocks can create a dramatic look but be sure you have the resources to move and position them. Also, match the size of the rocks to the size of the garden as well as the size of the plants you plan to grow. Large rocks can overwhelm tiny plants.

The pH (acidity or alkalinity) of the rocks may affect what plants you can grow. For example, acid loving plants may not grow well surrounded by limestone, an alkaline material. If you're lucky, you may already have some rocks on your site. Rocks can be obtained from quarries or some large garden centers. Rocks from quarries may be less weathered than those from other sources. A local landscaper may also be able to supply you with rocks (and the resources necessary to move them) or refer you to someone who can.

Types of Plants
- Annuals:
  - Alyssum
  - Buckwheat
  - Nasturtium
  - Osteospermum
  - Sedum
- Biennials:
  - Lowbush blueberry
  - Heath
  - Creeping juniper
- Perennials:
  - Bellflower
  - Columbine
  - Dianthus
  - Hens & chicks
  - Rockcress
  - Sedum
  - Stonecrop
  - Viola
- Shrubs:
  - California poppy
  - Globe amaranth
  - St. John's wort
- Grasses
- Herbs (thyme, lavender, sage)
- Seeds

While most rock gardens contain primarily perennials, you can also use annuals to fill in, especially when the garden looks a little bare while getting established.

You will see some rock garden plants described as alpine plants. These grow naturally at higher altitudes or under arctic or subarctic conditions. They are tough plants, adapted to harsh conditions. However, they are not ideally suited to our hot humid summers and lack of snow cover in winter. But some are more adaptable than others, and with a little TLC many can be grown in our area.

Many common perennials or bedding plants can be used in the rock garden. Other rock garden plants may be harder to find but are worth looking for. Try specialty nurseries or look online. A few may be available only by growing from seed.

A Few Suggested Plants

Perennials:
- Bellflower
- Bulbs
- Coral bells
- Grasses
- Herbs (thyme, lavender, sage)
- Primrose
- Sandwort
- Soapwort
- Succulents
- Thrift

Annuals:
- Alyssum
- Dahlberg daisy
- Nasturtium
- Portulaca

Shrubs:
- Creeping juniper
- Heath & heather
- Potentilla

When choosing plants, think low-growing and slow-growing - you don't want the plants to take over. Choose plants that are proportional to the size of the rocks and the size of the rock garden. Especially for smaller areas, choose low, small-leaved, creeping or cascading plants. Select a few plants with vertical as well as horizontal growing habits. In a larger area you can use small shrubs, dwarf conifers, or even small trees. If building a slope on flat ground, a backdrop of small trees or low shrubs can make it appear more natural.

Research your plants to see how they grow. Different varieties of the same plant may have very different sizes and growing habits. It's best to avoid plants that are invasive or aggressively grow or self-seed.

As in any garden, choose plants that are winter hardy and suited to the light, moisture, and soil conditions available. Group plants with similar growing requirements together. Select plants for interest throughout the year. Use plants with different bloom times, textures or evergreen foliage, etc.