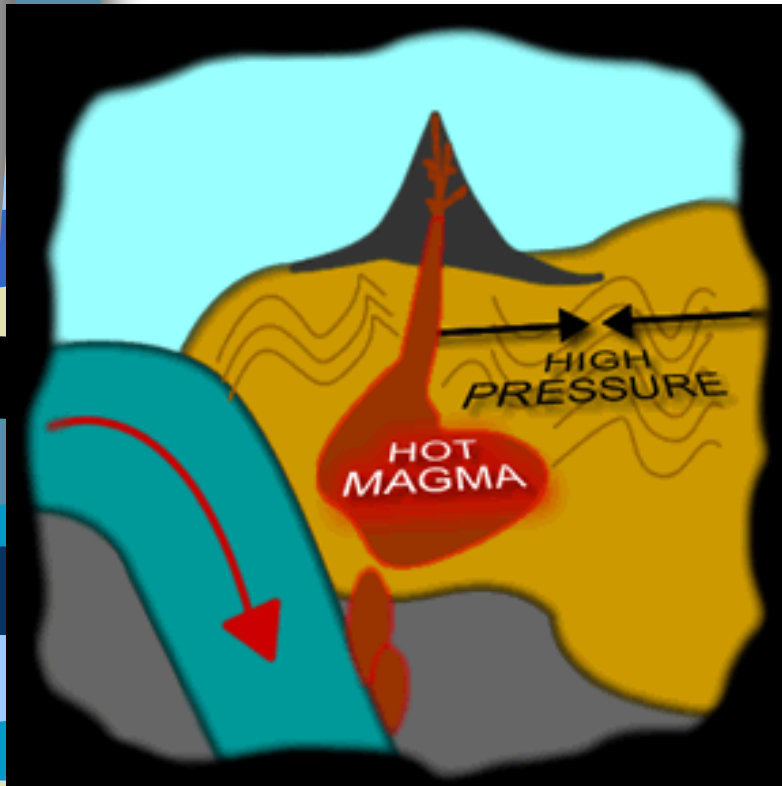


Metamorphic Rocks

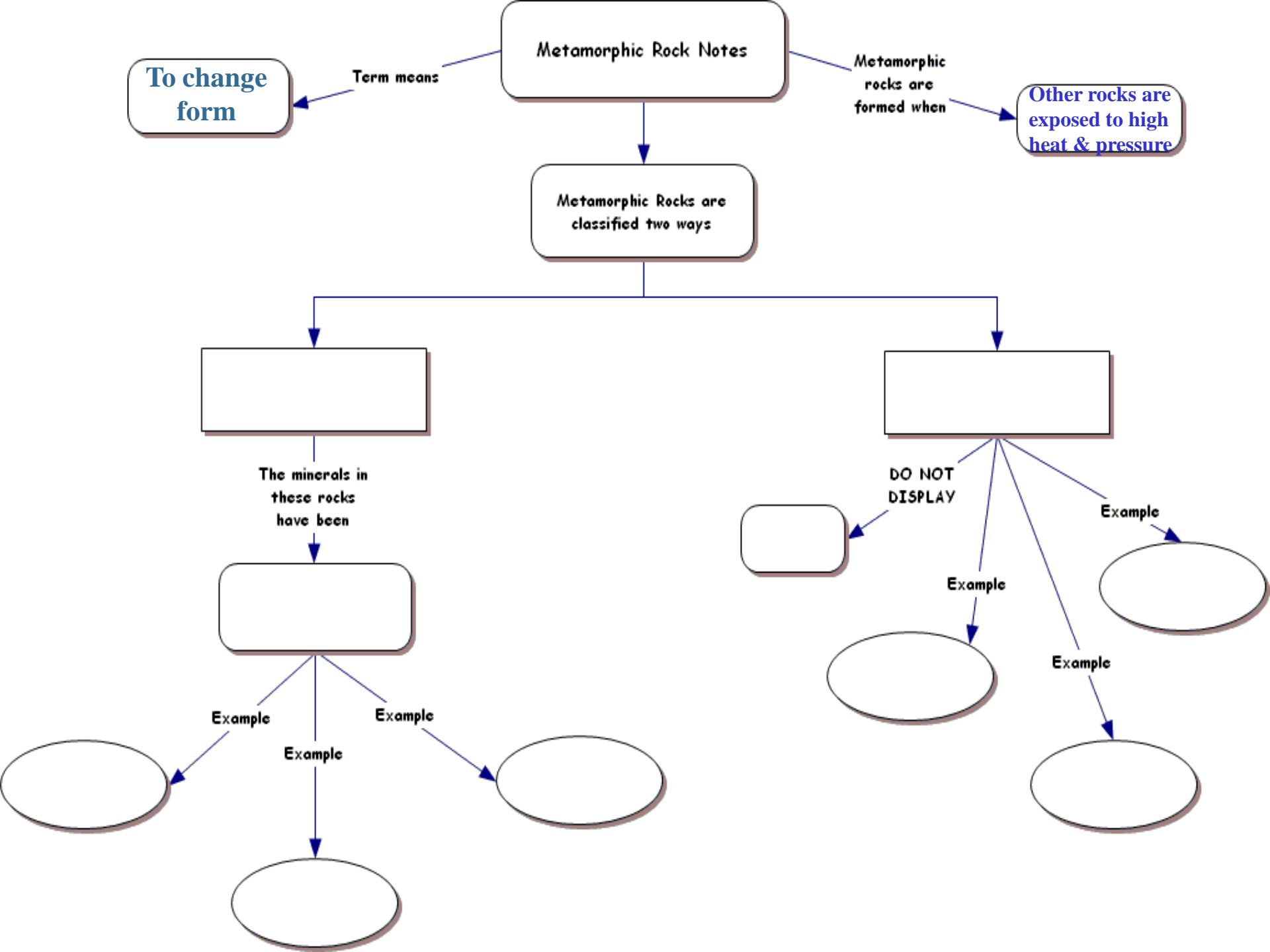


How a little bit of heat & pressure transforms rocks!

What is a metamorphic rock?



- The term "metamorphic" means "to change form."
- Any rock (igneous, sedimentary, or metamorphic) can become a **metamorphic** rock. If rocks are buried deep in the Earth at high temperatures and pressures, they form new minerals and textures all without melting. If melting occurs, magma is formed, starting the rock cycle all over again.



Metamorphic Rock Notes

To change form

Term means

Metamorphic rocks are formed when

Other rocks are exposed to high heat & pressure

Metamorphic Rocks are classified two ways

[Empty box]

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The minerals in these rocks have been

[Empty box]

Example

Example

Example

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[Empty oval]

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Example

Example

Example

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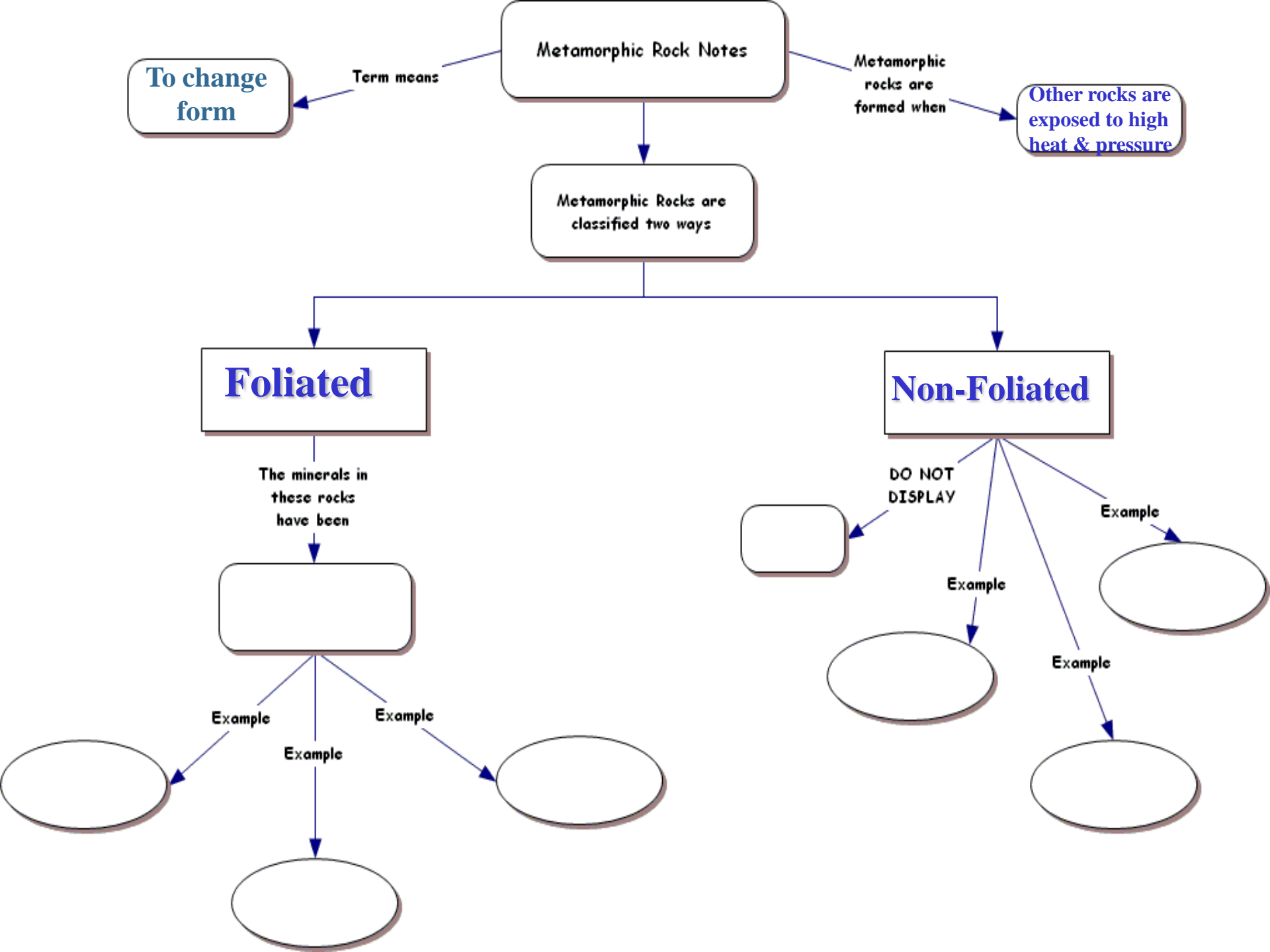
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Metamorphic Rock Types



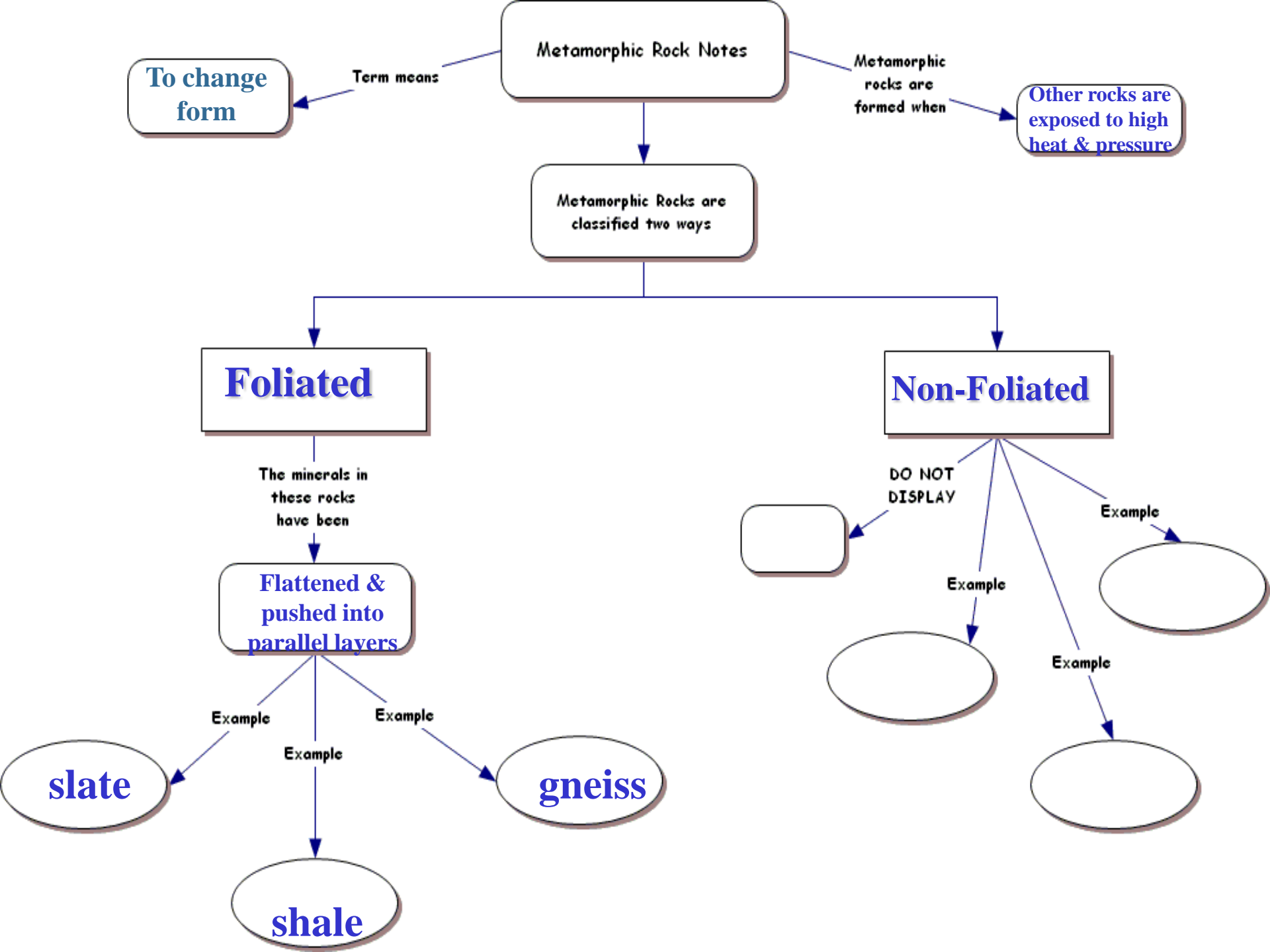
- There are two types of metamorphic rocks.
- Each is classified according to its composition and texture.
 - Foliated
 - Nonfoliated.



Foliated Metamorphic Rocks



- **FOLIATED** metamorphic rocks are those in which the minerals have been flattened and pushed down into parallel layers. The bands in foliated metamorphic rock look like pages in a book.
- Examples of foliated rocks are slate, shale, and gneiss.



Non-foliated



- **NON-FOLIATED** metamorphic rocks do not display layers. Rather, they are massive structures with no obvious banding. The mineral grains grow and rearrange, but they do not form layers.
- A good example of non-foliated rock is quartzite, the smooth-textured, metamorphosed form of the mineral quartz.
- A coarse-textured non-foliated rock is marble.
- Anthracite, or hard coal, is a non-foliated rock that forms when intense pressure drives gases out of soft coal, causing it to harden.

