Terminology

- Domain is the whole mesh.
    - The boundary of the whole mesh is simply termed the “boundary”.
- Sub-mesh is a subset of the whole mesh and corresponds to a computational sub-domain.
    - The boundary of a sub-mesh is called a sub-mesh boundary. Subdomains have disjoint “faces” but shares vertices and edges on their boundaries with adjacent sub-domains.
    - Sub-domains are used to spatially decompose the whole mesh into smaller computational units of work. This allows for coarse grain parallelization.
- A phase is a subset of the whole mesh.
    - The boundary of a phase is called an interface
    - Phases can have shared interfaces but can never share a “face”.
    - The boundary is also an interface, but a sub mesh boundary is not an interface.
    - Phases can be decomposed into several sub-meshes

Terminology illustrated