

IME 100 -.CASTING 1

IN CLASS WORK

OCTOBER 14, 2015

Class Preparation and Reading Review

This should be completed prior to class

Key Concepts to Be Discussed in Class:

Questions About Subject Matter for Class Session:

Question 2

- How much heat is required to heat 0.1m³ of tin (Sn) to 100°C above its melting point from room temperature (25°C)

Heat Capacity of Solid = 1,7x10⁶ J/(m³K)

$$\Delta H = VC_{PS} (T_M - T_0)$$

Heat Capacity of Liquid = 1,4x10⁶ J/(m³K)

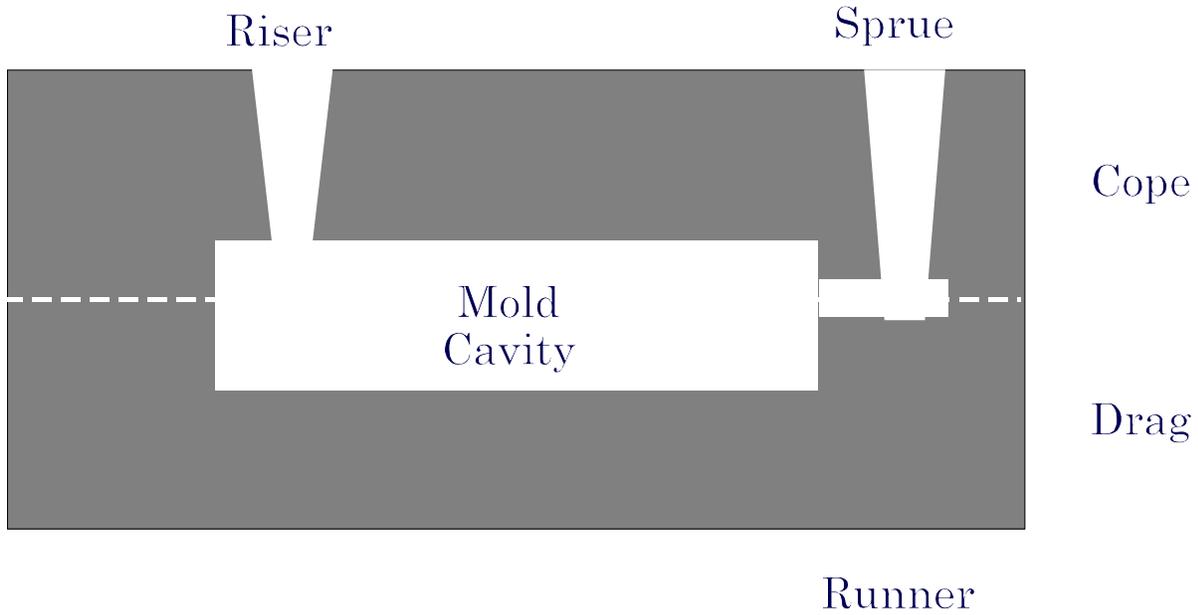
$$\Delta H = VC_{PL} (T - T_M)$$

Heat of Fusion= 1.3x10¹⁰ J/m³

$$\Delta H = V\Delta H_F$$

Question 3

- Consider the Green Sand Casting Sketch Shown Below



Describe how you would create this mold. What steps would be necessary? Why? In What Order and Why? How do these relate to the working definition of casting developed earlier?

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After Class Review

Summarize Key Concepts and List Further Questions

Review Notes and Make Links to HW Problems

<u>Key Concepts</u>	<u>HW Connections</u>	<u>Questions</u>