

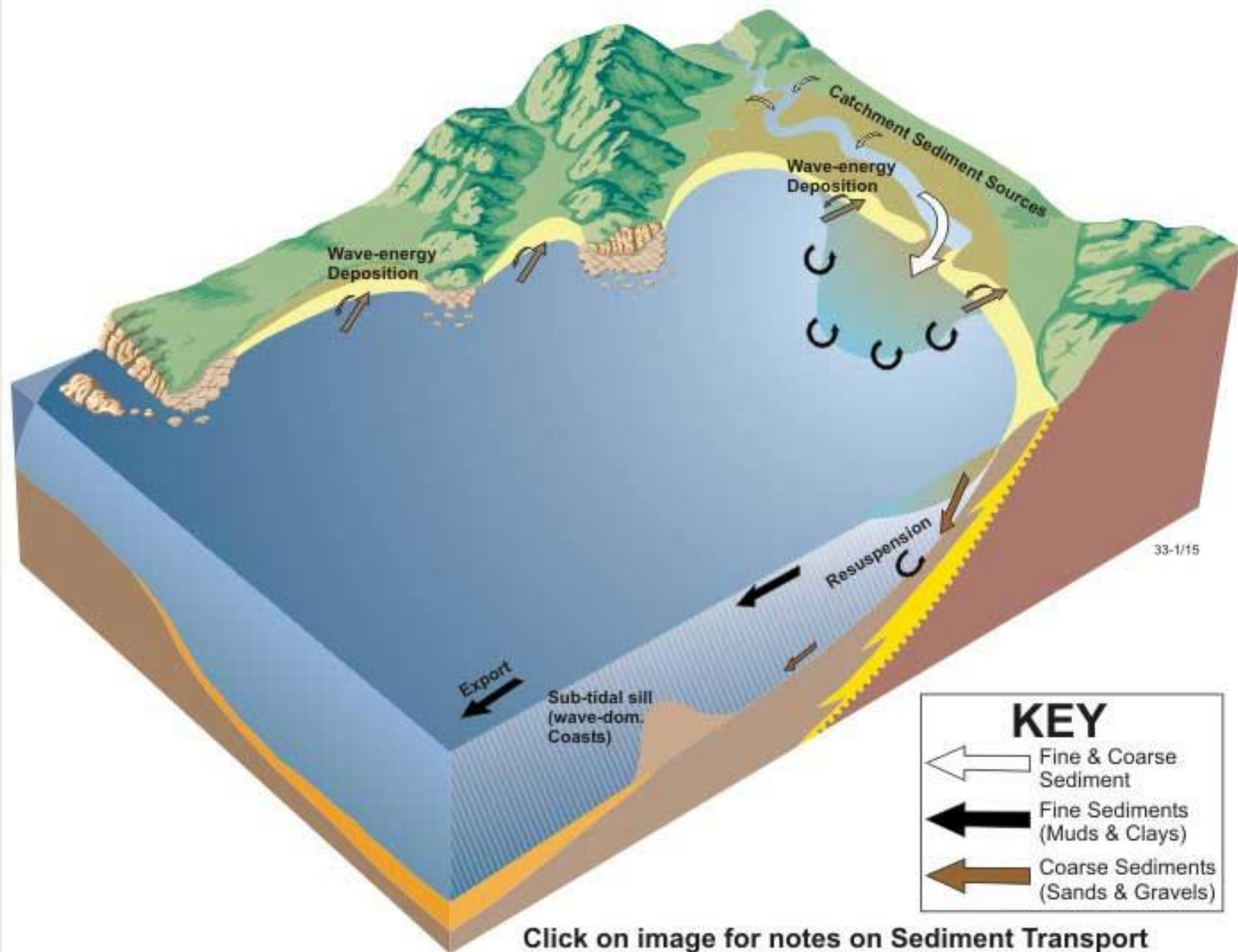


# JEM 458

# DENİZ JEOLOJİSİ

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10. Hafta



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	relative importance	idealized composition
Quarz	+++	SiO <sub>2</sub>
Calcite	+	CaCO <sub>3</sub>
Dolomite	+	(Ca,Mg)CO <sub>3</sub>
Feldspars		
Plagioclase	++	(Na,Ca)[Al(Si,Al)Si <sub>2</sub> O <sub>8</sub> ]
Orthoclase	++	K[AlSi <sub>3</sub> O <sub>8</sub> ]
Muscovite	++	KAl <sub>2</sub> [(AlSi <sub>3</sub> )O <sub>10</sub> ](OH) <sub>2</sub>
<b>Clay minerals</b>		
Kaolinite	+++	Al <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>
Mica Group		
e.g. Illite	+++	K <sub>0.8-0.9</sub> (Al,Fe,Mg) <sub>2</sub> (Si,Al) <sub>4</sub> O <sub>10</sub> (OH) <sub>2</sub>
Chlorite Groupe		
e.g. Chlorite s.s.	+++	(Mg <sub>3-y</sub> Al <sub>1</sub> Fe <sub>y</sub> )Mg <sub>3</sub> (Si <sub>4-x</sub> Al) <sub>4</sub> O <sub>10</sub> (OH) <sub>6</sub>
Smektite Groupe		
e.g. Montmorillonite	+++	Na <sub>0.33</sub> (Al <sub>1.67</sub> Mg <sub>0.33</sub> )Si <sub>4</sub> O <sub>10</sub> (OH) <sub>2</sub> ·nH <sub>2</sub> O
<b>Heavy minerals, e. g.</b>		
Amphiboles		
e.g. Hornblende	+	Ca <sub>2</sub> (Mg,Fe) <sub>4</sub> Al[(Si <sub>7</sub> ,Al <sub>22</sub> )](OH) <sub>2</sub>
Pyroxene		
e.g. Augite	+	(Ca,Na)(Mg,Fe,Al)[(Si,Al) <sub>2</sub> O <sub>6</sub> ]
Magnetite	-	Fe <sub>3</sub> O <sub>4</sub>
Ilmenite	-	FeTiO <sub>3</sub>
Rutile	-	TiO <sub>2</sub>
Zircon	-	ZrO <sub>2</sub>
Tourmaline	-	(Na,Ca)(Mg,Fe,Al,Li) <sub>3</sub> Al <sub>6</sub> (BO <sub>3</sub> ) <sub>3</sub> Si <sub>6</sub> O <sub>18</sub> (OH) <sub>4</sub>
Garnet		
e.g. Grossular	-	Ca <sub>3</sub> Al <sub>2</sub> (SiO <sub>4</sub> ) <sub>3</sub>