



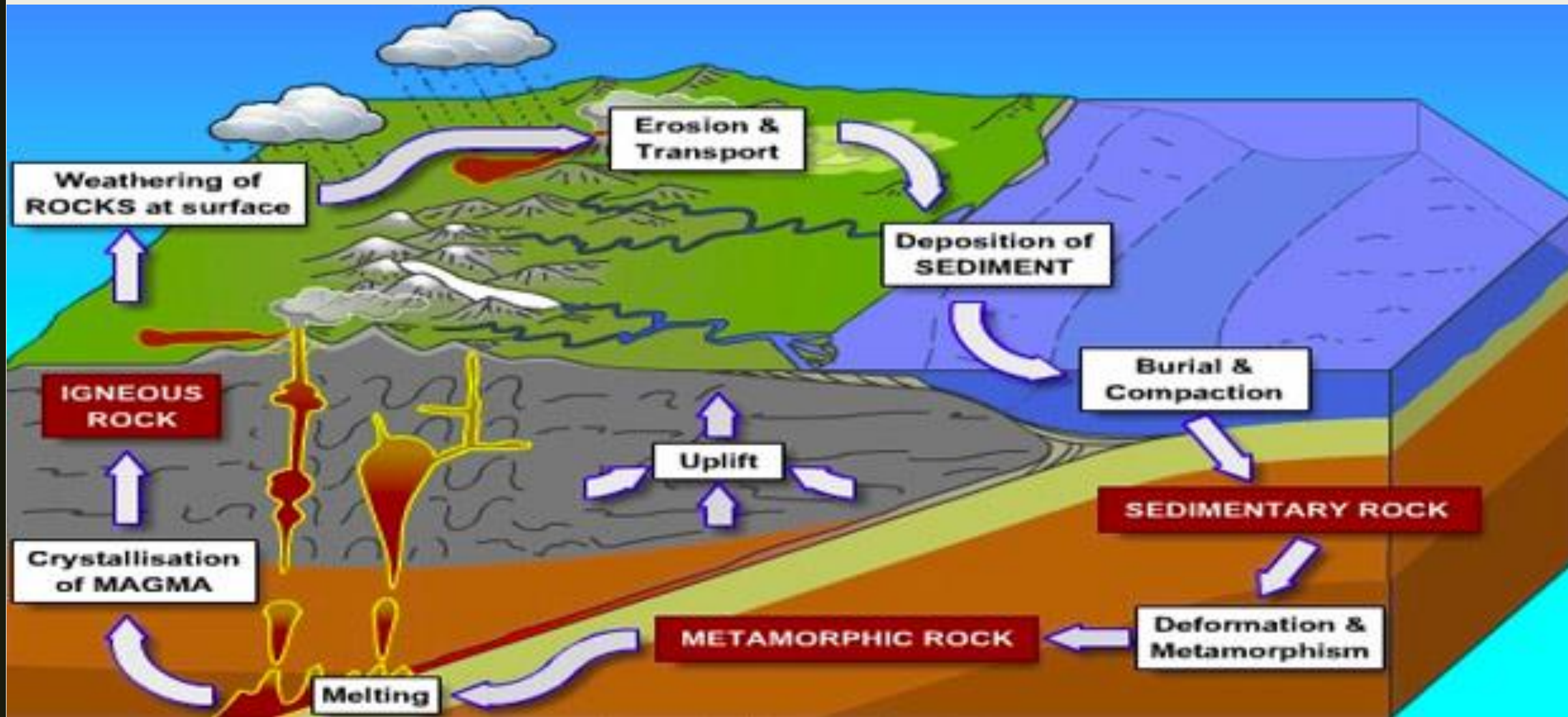
# JEM 458

# DENİZ JEOLOJİSİ

Arş. Gör. Dr. Kıymet DENİZ

8. Hafta

# Deniz nereden beslenir?



# *Kayaların Dayanımı*

<b>Rock Units</b>	<b>Dry Density (<math>\rho_d/\text{cm}^3</math>)</b>	<b>Saturated Density (<math>\rho_r/\text{cm}^3</math>)</b>	<b>Uniaxial Compressive Strength (<math>\text{N}/\text{mm}^2</math>)</b>	<b>Porosity (%)</b>	<b>Specific Gravity</b>
<b>Porphyritic Granite</b>	2.629	2.633	3.11	0.420	2.636
<b>Quartzite</b>	2.717	2.72	8.49	0.290	2.725
<b>Migmatite</b>	2.507	2.512	12.77	0.398	2.517
<b>Granite Gneiss</b>	2.632	2.633	5.68	0.110	2.635
<b>Mica Schist</b>	2.52	2.529	3.13	0.940	2.544

# *Kayaların Dayanımı*

<b>Strength classification</b>	<b>Strength range (MPa)</b>	<b>Typical rock types</b>
<b>Very weak</b>	<b>10-20</b>	<b>weathered and weakly-compacted sedimentary rocks</b>
<b>Weak</b>	<b>20-40</b>	<b>weakly-cemented sedimentary rocks, schists</b>
<b>Medium</b>	<b>40-80</b>	<b>competent sedimentary rocks; some low-density coarse-grained igneous rocks</b>
<b>Strong</b>	<b>80-160</b>	<b>competent igneous rocks; some metamorphic rocks and fine-grained sandstones</b>
<b>Very strong</b>	<b>160-320</b>	<b>quartzites; dense fine-grained igneous rocks</b>

# Minerallerin Sertlikleri

## PROPERTIES OF COMMON MINERAL FILLERS

Filler	Mica	Calcium Carbonate	Wollastonite	Glass Beads	Alumina Hydrate	Talc	Silica	Franklin Fiber	Clay
Property									
Water Content (%)	<5	<2	0.5	<0.1	34.6	4.8	<0.1	<1	<0.5
Specific Gravity	2.74-2.95	2.6-2.75	2.9	2.48	2.42	2.7-2.8	2.65	3	2.5
Hardness (Mohs)	2.4-3	3	4.5	5.5	2.3-3.5	1	7	2	4-6
Melting Point (°C)	1,300	900	1,540	1,200	200 to 600	Stable to 380	Stable to 573	-	1,810
Color	Gold-brown	White	White	Clear	White	Gray-white	White	White	White
Resistance to Acids/Alkalis	Good/Good	Poor/Fair	Poor/Fair	Good/Poor	Good/Good	Good/Good	Excellent/Poor	Good/Good	Good/Good

# Minerallerin Sertlikleri

FRACTURE CLEAVAGE	STREAK	COLOR	HARDNESS	FRACTURE CLEAVAGE	LUSTER	DIAPHANEITY	OTHER PROPERTIES	SPECIFIC GRAVITY	MINERAL NAME
CLEAVAGE	yellow or brown	yellow, brown, black	5 - 5.5	one direction indistinct	submetallic	translucent	silky, fibrous appearance	3.3 - 4.3	<b>GOETHITE</b>
	white, yellow, or brown	white, red yellow, brown, green, black	3.5 - 4	perfect cleavage in 6 directions	submetallic	translucent	brittle, looks like resin	3.9 - 4.1	<b>SPHALERITE</b>
	colorless	dark green, dark brown, or black	2.5 - 3	perfect cleavage in one direction	submetallic	translucent	thin flakes, tough, flexible	2.8 - 3.2	<b>BIOTITE</b>
	black	black, silver, or gray	1 - 2	cleavage sometimes indistinct	metallic or submetallic	opaque	marks paper, soils fingers, slippery	2.23	<b>GRAPHITE</b>
FRACTURE	black	brassy yellow	6 - 6.5	conchoidal fracture	metallic	opaque	sometimes in crystal shapes	5.02	<b>PYRITE</b>
	reddish	red - brown, black, silver	5 - 6.5	fracture	metallic or submetallic	opaque	sometimes oolitic or magnetic	5.56	<b>HEMATITE</b>
	black	black or silver	6	fracture	metallic or submetallic	opaque	strongly magnetic	5.18	<b>MAGNETITE</b>
	black	brownish	4	fracture	metallic	opaque	weakly magnetic	4.58 - 4.65	<b>PYRRHOTITE</b>
	greenish black	brassy yellow	3.5 - 4	fracture	metallic	opaque	brittle	4.1 - 4.3	<b>CHALCOPYRITE</b>