



T.C.  
Ankara Üniversitesi  
Mühendislik Fakültesi  
Jeoloji Mühendisliği Bölümü



# JEM 227 GEMOLOJİ

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2. Hafta

2020-2021 Güz Dönemi

Bu ders notlarının hazırlanmasında Mefail Yenyol'un sunumlarından ve Mineraloji kitabından yararlanılmıştır.

# MERCAN

## PROFILE



Trigonal



Orthorhombic

Amorphous



3½



2.6–2.7



None



Hackly



White



Dull to vitreous



Bonewitz, R. L. (2012)

Kimyasal Formülü

$\text{CaCO}_3$

## VARIANTS

### Blue coral

A type of coral used in artifacts and jewelry



### Black coral

A variant that is polished to make jewelry

### Brain coral

An elaborate confection of organic aragonite



### Coral necklace

This triple-stranded necklace from Morocco is made of coral, silver, and turquoise.

## Red coral

The use of red coral dates back to the Iron Age. This specimen from the Mediterranean has a wood-grain pattern on its branches.

# İNCİ

## PROFILE



Orthorhombic



3



2.7



None



Uneven, brittle



White

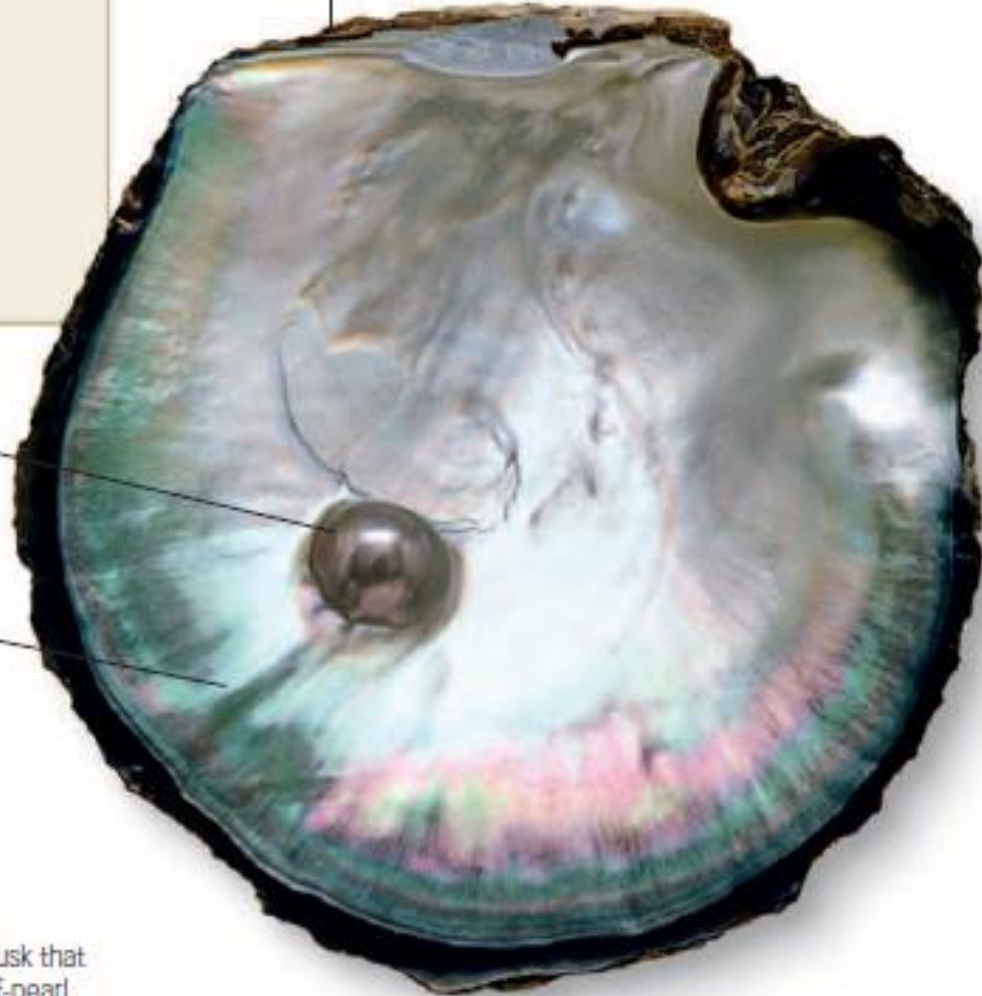


Pearly

conchiolin covering

black pearl

iridescent  
mother-of-pearl



### Black mother-of-pearl

The black-lip shell, a mollusk that produces black mother-of-pearl, also produces black cultured pearls.

Bonewitz, R. L. (2012)

Kimyasal Formülü

$\text{CaCO}_3$



### Pearl bracelet

This Cartier Art Deco bracelet has five strands of cultured pearls with a gold and oxidized-silver clasp.

# KAVKI

## PROFILE



Hexagonal



Orthorhombic

Amorphous



2 1/2



About 1.3



None



Conchoidal



White



Dull to vitreous

iridescent  
mother-of-pearl



inner surface  
of shell

### Abalone shell

Found in warm seas, abalone shells, such as this one from New Zealand, are noted for their multicolored, iridescent, mother-of-pearl lining.

Kimyasal Formülü

$\text{CaCO}_3$



### Shell perfume bottle

This 19th-century perfume bottle is made of two shells glued together. It has a chain, ring, and pinchbeck stopper.

Bonewitz, R. L. (2012)

# REÇİNE

## PROFILE

Crystal system None

2-2½

About 1.1

None

Conchoidal

White

Resinous



translucent copal

golden-yellow color

conchoidal fracture

### Copal nugget

This specimen of copal closely resembles amber. Some copal is used as an amber substitute in jewelry.

Bonewitz, R. L. (2012)



### Copal beads

In this necklace, beads of a tough and compact form of copal alternate with beads carved from seeds.

# KEHRİBAR

## PROFILE

Crystal system None

2-2½

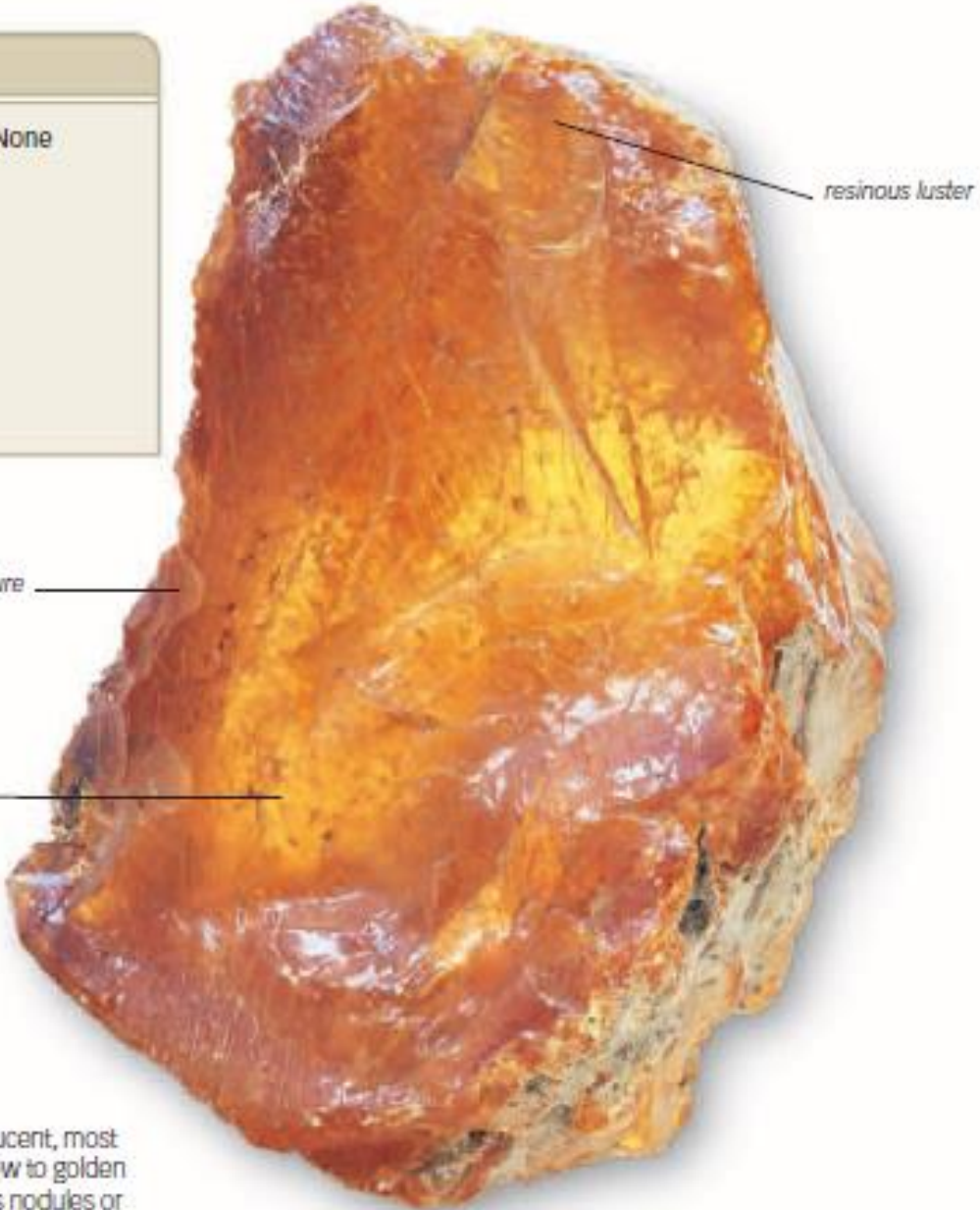
1.1

None

Conchoidal

White

Resinous



Kimyasal Formülü C, H, O

**Amber nodule**  
Transparent to translucent, most amber is golden yellow to golden orange and occurs as nodules or small, irregularly shaped masses.

Bonewitz, R. L. (2012)



**Preserved in amber**  
As resin dried 40-50 million years ago, insects were sometimes fossilized within the sticky substance.

# OLTUTAŞI

## PROFILE

Crystal system None

▽ 2 ½

○ About 1.3

▣ None

⊞ Conchoidal

▣ Black to dark brown

⊞ Velvety, vitreous,  
or waxy

*bedded structure*

*vitreous luster*

### Woody structure

This specimen of jet shows the layered, woody structure that is sometimes characteristic of the mineral.



### Jet necklace

This Native American necklace is made of high-quality, fine-grained jet, which shows velvety luster.

Bonewitz, R. L. (2012)