

mat 

a world of materials

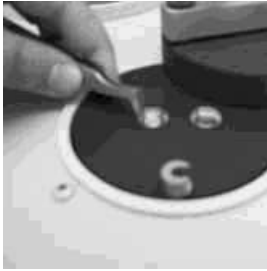
many products



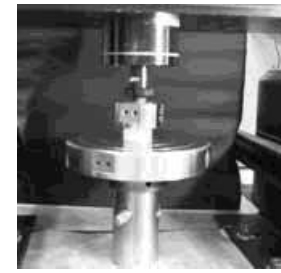
reality

each with its own reality

material data



stress relaxation

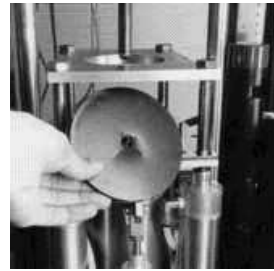


compressive

tensile



viscosity



fatigue



conductivity

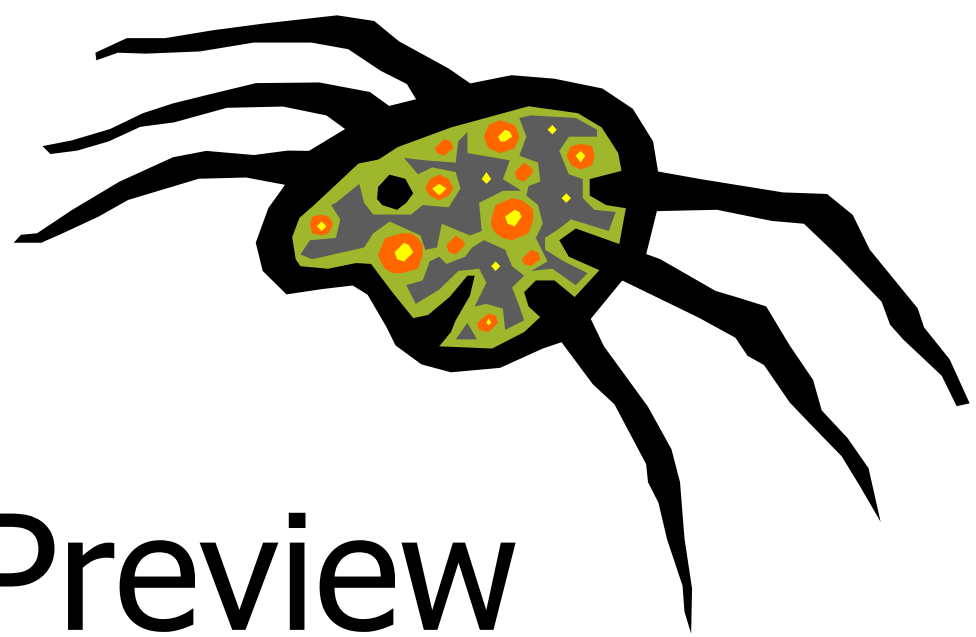


expansion

properties that describe reality

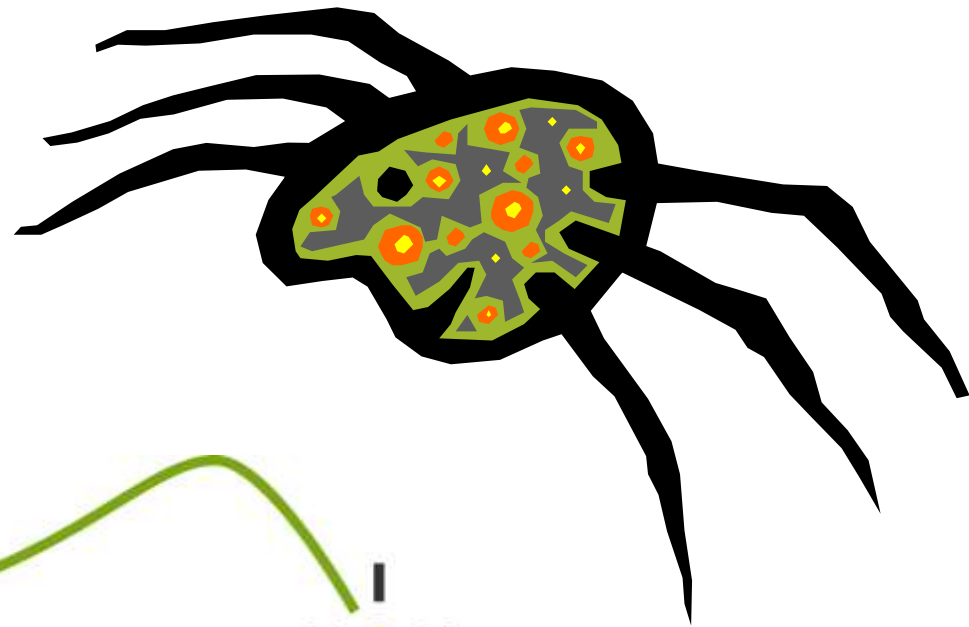


web services for material data



Sneak Preview

sneak peek.....



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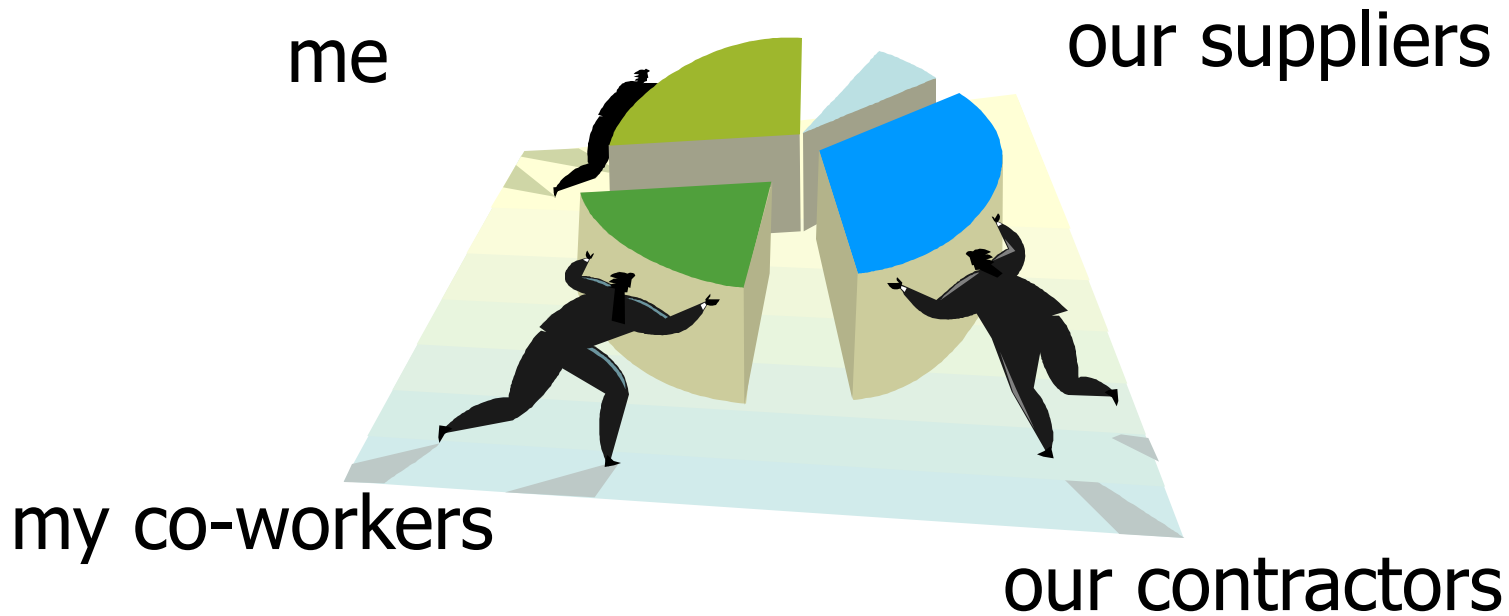
a knowledge web

Knowledge web?

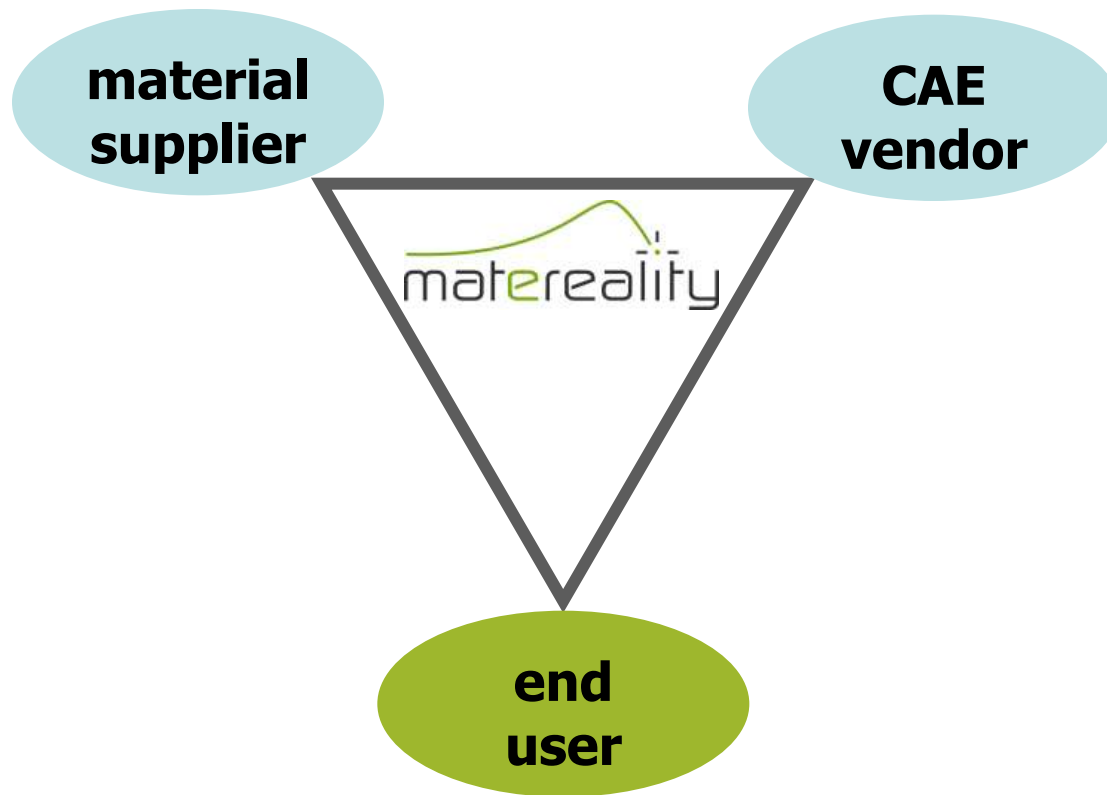
- Place where stakeholders share data



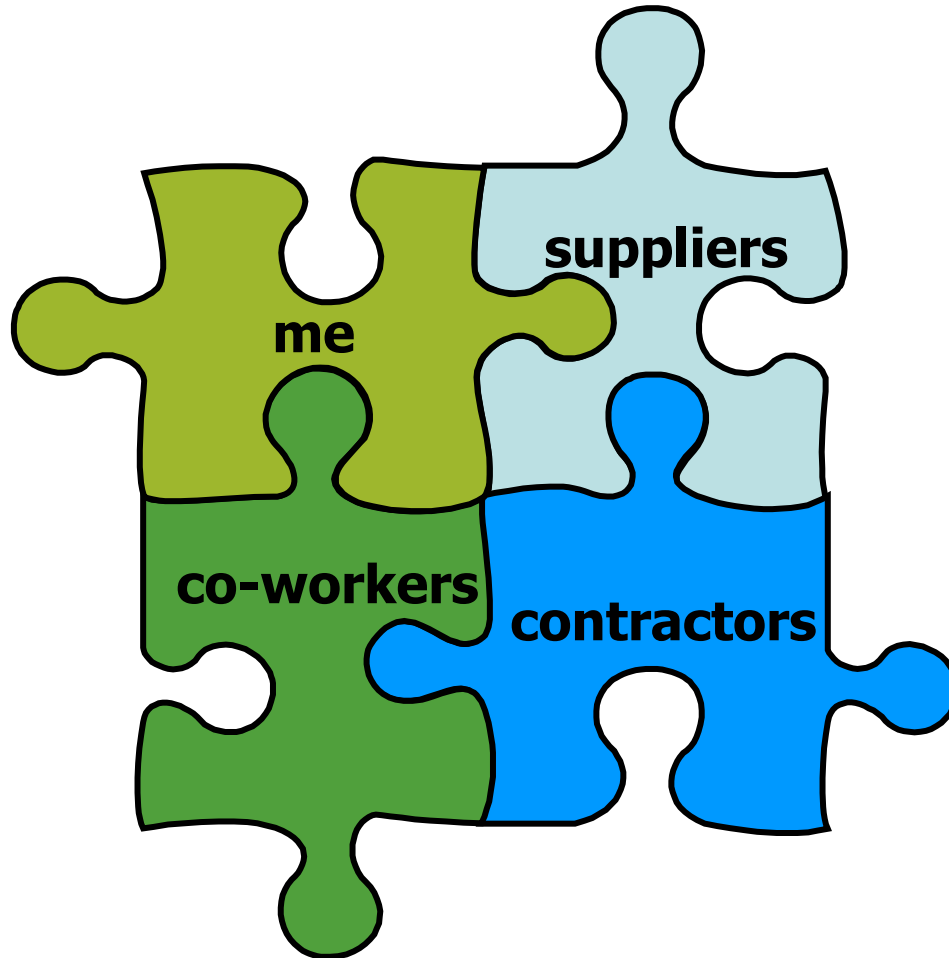
Who are the stakeholders?



Stakeholders: partners in development



Webs are collaborative,



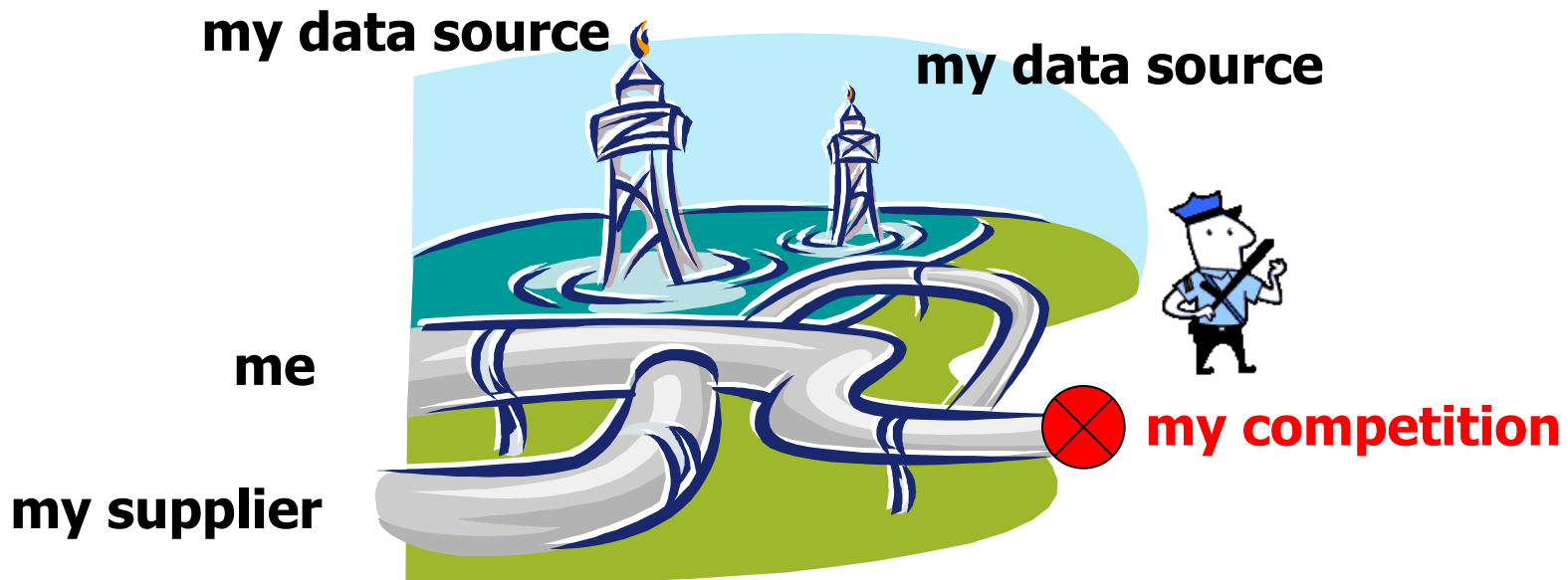
secure,



knowledge

and flexible!

- Webs make efficient data pipelines

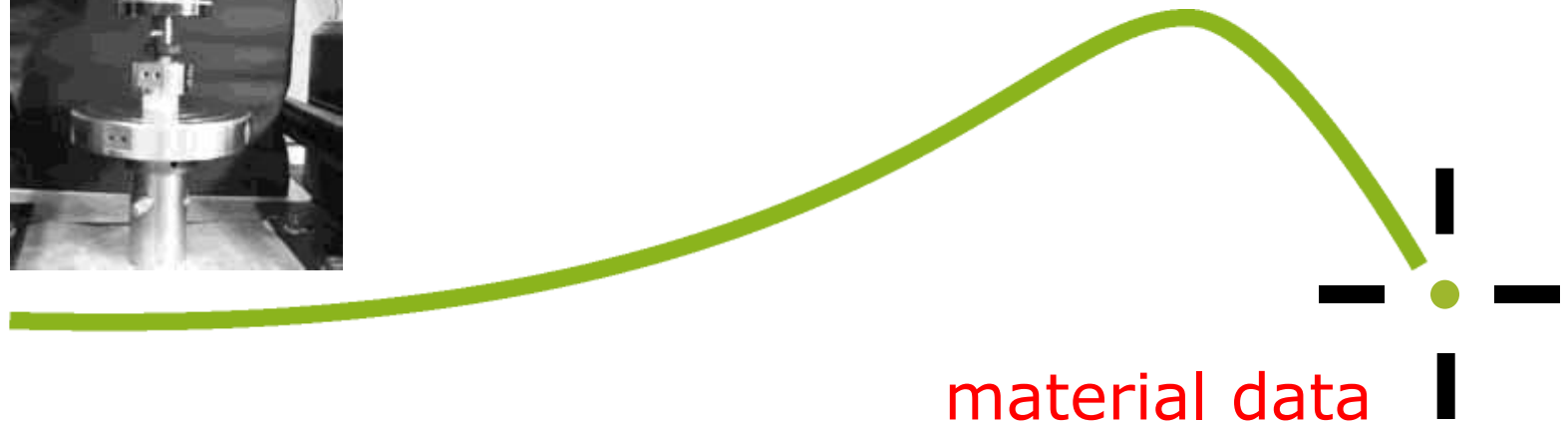
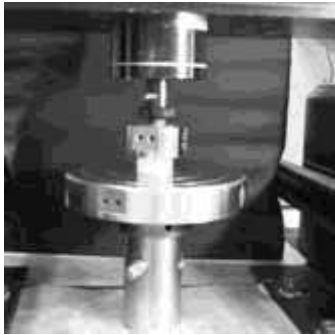




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creates **secure**, flexible networks

What's inside?



properties for your reality

Mechanical Data



compressive

tensile

fatigue



impact

friction

creep

hyperelastic

Thermal Data

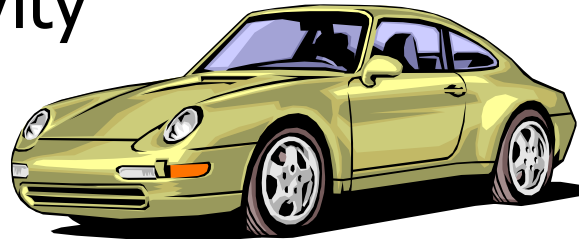


stress relaxation



thermal expansion

thermal diffusivity



thermal conductivity

PVT

heat capacity

Flow Data



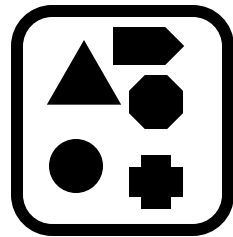
shear viscosity



elongational viscosity

die-swell

visco-elasticity



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accommodates data diversity

What about content?



What makes the data real for me?

Pertinence

- Properties depend on application
 - Data at conditions comparable with your reality
 - Self consistent properties
 - Complete material property collections
 - Properly identified

valid data

Objectivity

- Real data from qualified data providers
 - Material suppliers
 - Internal labs
 - Certified data sources like DatapointLabs

data **fidelity**



Traceability

- Data source
 - Where tested
 - Who tested
 - When tested
- Raw data
- Test results
 - Models trace back to raw data

know **where** its coming from



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the authoritative source

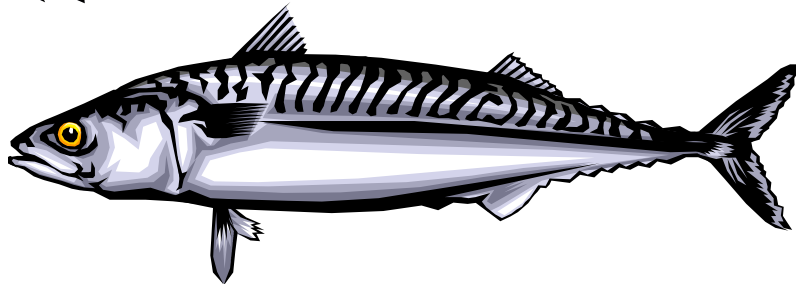
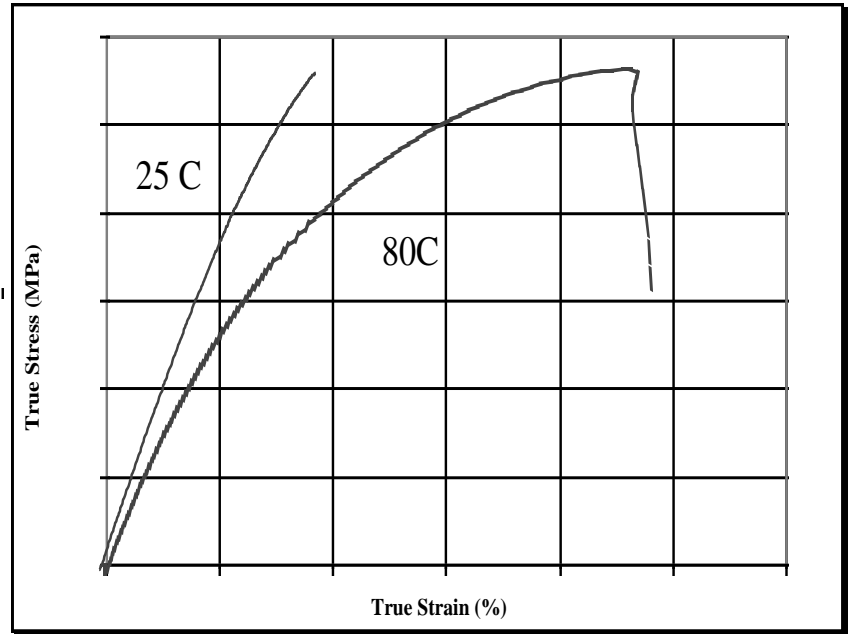
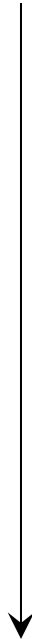
A web service?



How would you like your data?

Unformatted?

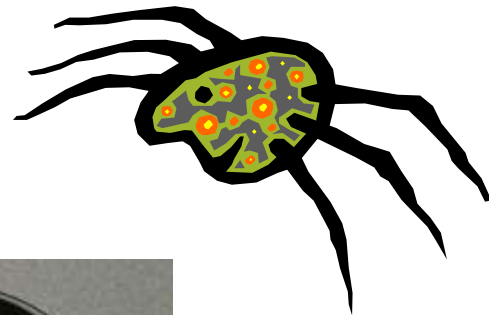
- You prepare it
- You judge quality



or formatted!

- plots
- tables
- CAE model coefficients
- electronic data output
- multiple unit systems

- Validated
- Ready to use





matereality

serves **ready-to-use** data

Benefits

- Increased design confidence
- Consistent use of data across design platform
- Reduced time to market
- Traceable material data
- Diverse property types
- Single license to enterprise solutions

Beta Release: Nov 2002

www.matereality.com

Material properties for a
collaborative world



material (ma·te·ri·al)

- (1) : the elements, constituents, or substances of which something is composed or can be made
- (2) : matter that has qualities which give it individuality and by which it may be categorized

Merriam Webster Collegiate Dictionary

-Date: 1556



reality (re·al·i·ty)

1: the quality or state of being real

2 a (1): a real event, entity, or state of affairs

2 a (2): the totality of real things and events

2 b : something that is neither derivative nor dependent but exists necessarily

Merriam Webster Collegiate Dictionary

-Date: 1550

The logo for 'matereality' features a green line that starts low on the left, rises to a peak above the letter 'e', and then descends to the right. Below this line, the word 'matereality' is written in a lowercase, sans-serif font. The 'e' in 'matereality' is colored green to match the line above it, while the other letters are black.

matereality (ma·te·re·al·i·ty)

1: collections of material properties that realistically represent product behavior

2: material properties used in virtual product development

-Date: 2002

