Meeting metals

The project has a wide range of activities on metals, so we have decided to put a selection of them on line. You will need to print the sets of metals cards on different coloured card and cut out each card separately so that you have enough for the whole class. Some juggling will be necessary to organise the class into fours. You may want to deal the cards strategically to arrange for certain students to work together. You can then use the groupings for practical work.

We have now added a set of four metals with similar organised texts and visual clues for use in CLIL classrooms or in primary classrooms. You will need to put coloured dots on the cards to mark different sets of four.

The webaddress for this activity is http://www.collaborativelearning.org/meetingmetals.pdf

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COLLABORATIVE LEARNING PROJECT
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Supporting a cooperative network of teaching professionals throughout the European Union to develop and disseminate accessible interactive teaching materials in all subject areas and for all ages.

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BRIEF SUMMARY OF BASIC PRINCIPLES BEHIND OUR TEACHING ACTIVITIES:

The project is a teacher network, and a non-profit making educational trust. Our main aim is to develop and disseminate classroom tested examples of effective group strategies that promote talk across all phases and subjects. We hope they will inspire you to develop and use similar strategies in other topics and curriculum areas. We want to encourage you to change them and adapt them to your classroom and students. We run teacher workshops, swapshops and conferences throughout the European Union. The project posts online many activities in all subject areas. An online newsletter is also updated regularly.

*These activities are influenced by current thinking about the role of language in learning. They are designed to help children learn through talk and active learning in small groups. They work best in non selective classes where children in need of language or learning support are integrated. They are well suited for the development of speaking and listening . They provide teachers opportunities for assessment of speaking and listening.

*They support differentiation by placing a high value on what children can offer to each other on a particular topic, and also give children the chance to respect each other's views and formulate shared opinions which they can disseminate to peers. By helping them to take ideas and abstract concepts, discuss, paraphrase and move them about physically, they help to develop thinking skills.

*They give children the opportunity to participate in their own words and language in their own time without pressure. Many activities can be tried out in mother tongue and afterwards in English. A growing number of activities are available in more than one language, not translated, but mixed, so that you may need more than one language to complete the activity.

*They encourage study skills in context, and should therefore be used with a range of appropriate information books which are preferably within reach in the classroom.

*They are generally adaptable over a wide age range because children can bring their own knowledge to an activity and refer to books at an appropriate level. The activities work like catalysts.

*All project activities were planned and developed by teachers working together, and the main reason they are disseminated is to encourage teachers to work more effectively with each other inside and outside the classroom. They have made it possible for mainstream and language and learning support teachers to share an equal role in curriculum delivery. They should be adapted to local conditions. In order to help us keep pace with curriculum changes, please send any new or revised activities back to the project, so that we can add them to our lists of materials.

Meeting metals

Everyone in the class takes or is given a metal information card. Everyone should read the information on their card two or three times. You do not have to remember the card word for word, but memorise some of the information on it. You may also know other facts about the metal.

Find someone else in the room with the same coloured card as you. Pretend to be the metal and introduce yourself to your new partner:

eg. "Hello! I am heavy and soft. I am poisonous and cause brain damage.....".

Your partner should do the same to you. Remember! If either of you get stuck, you can take a look at your card.. But only if you are stuck. Listen carefully to each other.

Now go to find another two people with the same colour card as you. Now you are four. You have to introduce your partner to the others and they have to introduce each other to you.

eg: "Hello! Can I introduce you to my new friend. You have to be a bit careful with matches because he burns brightly with a strong white light."

Meeting Some Metals

Silver You are whitish grey. You are heavy and rather soft. You are very resistant to corrosion. You can easily be drawn out into thin threads or beaten into flat sheets. You are expensive and you are often made into jewellery.	Gold You are bright yellow and sometimes yellowy-red. You are soft and very heavy. You are very resistant to corrosion. You are rare and expensive. People used to make you into coins. Nowadays people make jewellery out of you.	Copper You are a reddish brown metal. Because you are very good at conducting heat and electricity, you are used for cooking pans and electrical wires. You are resistant to corrosion. You are used for making the alloys brass and bronze.	Magnesium You are a light silvery-white metal. You burn with an intense white light and therefore you are used for making fireworks and flares. You are also used for making light alloys for producing aircraft, jet engines and missiles.
Lead You are very heavy and soft. You are grey in colour. You have a low melting point and you are a poor conductor of electricity. You are resistant to acids. You are poisonous. You are good at shielding people and things from radiation. You are used for making roofs.	Tin You are silver-white. You are quite soft and can be rolled and hammered into thin sheets. You have a low melting point. You are resistant to corrosion, and therefore you are used to coat other metals. You are used to make the alloy bronze.	Zinc You are bluish-white. You are hard but you are also brittle. You are used to make the alloy brass. You are also used to make battery electrodes. You are used for galvanising iron because you are less resistant to corrosion than iron.	Aluminium You are a very abundant metal. You are silvery-white and very light. You are not very strong. You are a very good conductor of electricity. You are used for making ships and planes and also containers for beer and soft drinks.

Meeting Four Metals

Copper (Cu)

You are a red / brown coloured metal.
You are very good at conducting heat and electricity
so you are used for making cooking pans and electrical wires.

Aluminium (Al)

You are a shiny white coloured metal
You are very light and not very strong.
You are not very good at conducting electricity.
You are used for making ships and planes and also for cans for beer and soft drinks.

Lead (Pb)

You are a grey coloured metal. You are very heavy and soft.
You are the worst metal at conducting electricity. You are poisonous. You are good at shielding people and things from radiation.

Silver (Ag)

You are a shiny grey coloured metal. You are heavy and rather soft.
You are excellent at conducting electricity.
You are expensive and you are often made into jewellery.