

LIMESTONE IN THE WORLD

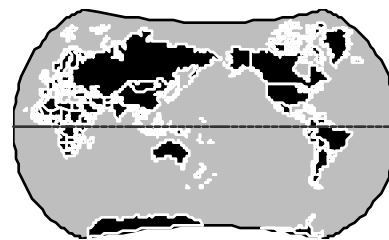
Objectives:

Students will:

- discover where the longest and deepest caves in the world are located
- correlate the presence of limestone with the location of long and deep caves.

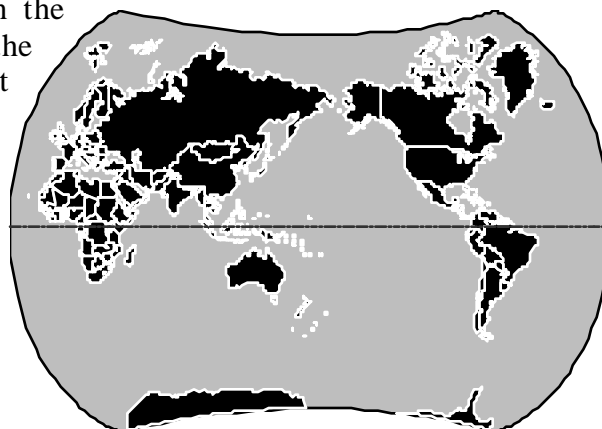
Materials:

- Large, laminated world map
- Names and locations of 50 longest and 50 deepest caves in the world, on small strips of paper
- Hat or bowl
- 2 large dry-erase markers (different colors)
- World atlas and/or geography text
- The book *Caves* by Stephen Kramer



Procedure:

1. Tell the class that they are going to locate the longest and deepest cave in the world. Walk around the room, allowing each student to pick one cave name/location out of the hat or bowl. Repeat until all of the caves have been distributed. The caves are listed by length in meters. Cave lengths change as more cave is discovered. To find the most up-to-date information have the students connect to the National Speleological Society's website and research cave lengths.
2. Give the students enough time to research the location of their caves, using a geography text or atlas. You may need to help the students with some of the more obscure cave locations.
3. As soon as a student knows the location of one or more of their caves, they may locate it and mark it on the large world map, using a dry-erase marker. Make sure that all caves are marked in one color. The other dry-erase marker is for your use later on!
4. Once all of the caves have been located, ask the students why they think the caves are located where they are. Is there a certain rock type that is best for cave formation? The students may remember from the video that 95% of caves are formed in limestone. With the other marker color, shade the areas of the map where large limestone deposits are found, using the map on page 14 of the enclosed book, *Caves*.
5. Do the students see a connection between the locations of limestone deposits and the locations of caves? Which caves are not located in limestone regions? Why is there no limestone in Hawaii? Discuss lava tubes and other non-limestone caves. Are there any large deposits of limestone in the world that do not contain extensive caves? Why? In some areas, exploration of caves may be difficult for political reasons (such as China).



Long 1 Mammoth Cave: Kentucky, USA 517317m

Long 2 Optimisticeskaja:Ukrainskaja Ukraine 212000m

Long 3 Jewel Cave: South Dakota, USA 195615 m

Long 4 Holloch: Schwyz, Switzerland 182540m

Long 5 Lechuguilla: New Mexico, USA 170269m

Long 6 Wind Cave: South Dakota, USA 151600m

Long 7 Siebenhengste-hohgant Hohlsystem: Berne, Switzerland 145000m

Long 8 Friar Ridge Cave System: Kentucky, USA 144841m

Long 9 Ozernaja: Ukrainskaja, Ukraine 117000m

Long 10 Gua Air jernih-Lubang Batau Padeng: Sarawak, Malaysia 109000m

Long 11 System de Ojo Guarena: Burgos, Spain 100000m

Long 12 reseau de la Coumo d'Hyuernedo: Naute-Garonne, France 94843m

Long 13 Sistema Purificacion: Tamaulipas, Mexico 90474m

Long 14 Zolushka: Moldarakaja, Ukraine 90200m

Long 15 Hirlatzhohle: Oberosterreich, Austria 84992m

Long 16 Toca da Boa Vista: Bahia, Brazil 84000m

Long 17 Friars Hole Cave System, West Virginia, USA 71052m

Long 18 Sistema Ox Bel Ha: Quintana Roo, Mexico 70650m

Long 19 Easegill System: Yorkshire Dales, UK 70500m

Long 20 Raucherkarhohle, Oberosterreich, Austria 65000m

- Long 21 Organ Cave System: West Virginia, USA 63569m
- Long 22 Ogof Draenen: South Wales, UK 62000m
- Long 23 Kazumura Cave, Hawaii, USA 61420m
- Long 24 Nohoch Nah Chichn: Quintana Roo, Mexico 60985L
- Long 25 Reseau de L'Alpe: Isere, France 60247m
- Long 26 Red Del Rio Silencio: Cantabria, Spain 60000m
- Long 27 Bullita Cave System: Northern Territory, Australia 57500m
- Long 28 Kap-Kutan: Turkistan, Turkmenistan 57000m
- Long 29 Sistema Huautla: Oazaca, Mexico 55953m
- Long 30 Cenote Dos Ojos: Quintana Roo, Mexico 55322m
- Long 31 reseau de la Dent de Crolles: Isere, France 55250m
- Long 32 Mamo Kananda: Southern Highland, Papua New Guinea 54800m
- Long 33 reseau de la Pierre Saint Martin: Pyre., France 53950m
- Long 34 Blue Spring Cave, Tennessee, USA 53366m
- Long 35 Dachstein-Mammuthohle: Oberosterreich, Austria 52944m
- Long 36 Complesso del Monte Corchia: Toscana, Italy 52300m
- Long 37 Martin Ridge System: Kentucky, USA 51884m
- Long 38 Ogof Ffynnon Ddu: South Wales, UK 50000m
- Long 39 Carlsbad Cavern: New Mexico, USA 49680m
- Long 40 Gr. Cacerna de Palmarito: Pinar del Rio, Cuba 48000m

- Long 41 Santo Tomas: Pinar del Rio, Cuba 46000m
- Long 42 Crevice Cave: Missouri, USA 45546m
- Long 43 Barendschacht: Bern, Switzerland 45400m
- Long 44 sima del Hayal di Ponata: Vizeaya-Ayah, Spain 45000m
- Long 45 Cumberland Caverns: Tennessee, USA 44444m
- Long 46 Lamprechtsofen-Vogelschacht: Salzburg, Austria 44000m
- Long 47 Kolkbluser-Monsterhohle: Salzburg, Austria 43857m
- Long 48 Sima del Mortero do Astrana: Cantabria, Spain 43000m
- Long 49 Bol'shaja Oreshnaja: Russia, Russia 43000m
- Long 50 Sistema de los Cuatro V.: Cantabria, Spain 43216m
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- Deep 1 Lamprechtsofen-Vogelshacht: Salzburg, Austria 1632m
- Deep 2 gouffre Mirola/ Lucien Coudlier: Haute-Savoie, France 1610m
- Deep 3 Reseau Jean Bernard: Haute-Savoie, France 1602m
- Deep 4 Torca del Cerro: Asturias, Spain 1589m
- Deep 5 Shakta Vjacheslav Pantjukhina: Abkhazia, Georgia 1508m
- Deep 6 Sistema Huautla: Oaxaca, Mexico 1475m
- Deep 7 Sistema del Trave: Asturias, Spain 1441m
- Deep 8 Boj-Bulok: Uzbekistan, Uzbekistan 1415m
- Deep 9 Laminako Aterneko Leizea: Nararra, Spain 1408m
- Deep 10 Sustavd Lukina jama: Velebit, Croatia 1393m

- Deep 11 Sistema Cheve: Oaxaca, Mexico 1386m
- Deep 12 Evern GUNAY sinkhole: Cukurpinar, Turkey 1377m
- Deep 13 Sniezhnaja-Mezhonnogo: Abkhazia, Georgia 1370m
- Deep 14 Ceki 2: Rombonski Podi, Slovenia 1370m
- Deep 15 Reseau de la Pierre Saint Martin: Pyre., France 1342m
- Deep 16 Siebenhengste-hohgant Hohlsystem: Bern, Switzerland 1340m
- Deep 17 Slovacka jama: Velebit, Croatia 1295m
- Deep 18 Cosanostraloch – Berger- Platteneck Hohle: Austria 1291m
- Deep 19 Gouffre Berger-Bouffre do la Fromagere: Isere, France 1278m
- Deep 20 Pozo del Madejuno: Leon, Spain 1255m
- Deep 21 Torca dos los Rebecos: Asturias, Spain 1255m
- Deep 22 Abisso Paolo Roversi: Toscana, Italy 1249m
- Deep 23 Vladimir V. Iljukhina System: Alkhazia, Georgia 1240m
- Deep 24 Sotano Akematl: Puebla, Mexico 1226m
- Deep 25 Schwerhohlsystem (Batmanhole): Salzburg, Austria 1219m
- Deep 26 Abisso Ulivifer: Toscana, Italy 1215m
- Deep 27 Kihaje Xontjoa: Oaxaca, Mexico 1209m
- Deep 28 Gorgothakas: Crete, Greece 1208m
- Deep 29 Dachstein-Mammuthohle: Oberosterreich, Austria 1199m
- Deep 30 Crnelso brezno: Rombonaki Podi, Slovenia 1198m

- Deep 31 Cukurpinar Dudeni: Anamur, Turkey 1195m
- Deep 32 Complesso del Monte Corchia: Toscana, Italy 1190m
- Deep 33 Vandima: Rombanaki, Slovenia 1182m
- Deep 34 Sistema Aranonera: Huesca, Spain 1179m
- Deep 35 Jubiläumsschacht: Salzburg, Austria 1173m
- Deep 36 g.de Bracas de Thurugne 6: Pyre., France 1172m
- Deep 37 Abisso Vive le Donne: Lombardia, Italy 1170m
- Deep 38 Anou Ifflis: Bouira, Algeria 1170m
- Deep 39 Sima 56 de Andara: Cantabria, Spain 1169m
- Deep 40 Torca Idoubeda: Picos do Europa, Spain 1167m
- Deep 41 Sistema Badlaona: Huesca, Spain 1150m
- Deep 42 Tanne des Pra d'Zeures: Haute-Savoie, France 1148m
- Deep 43 Sistema del Xitu: Asturias, Spain 1135m
- Deep 44 Sistem Molika Pec: DleskovskaPlanto, Slovenia 1130m
- Deep 45 Neide – Muruk Cave: New Britain, Papua New Guinea 1123m
- Deep 46 Arabikskaja: Abkhazia, Georgia 1110m
- Deep 47 Kazumura Cave: Hawaii, USA 1101m
- Deep 48 Schneeloch: Salzburg, Austria 1101m
- Deep 49 Sima G.E.S.M. de los Hoyos del Pilar: Malaga, Spain 1101m
- Deep 50 Jagergrunntro-Hohlensystem: Salzburg, Austria 1078mChina).