|  |  |
| --- | --- |
| **Miss Wong:** | Good morning. Please stand up. |
| **All Students:** | Miss Wong Good morning. |
| **Miss Wong:** | Good morning everyone. Please sit. |
| **All Students:** | Thank you Miss Wong. |
| **Miss Wong:** | Alright children. Today we are going to have a group discussion,and I’m going to introduce three new friends to all of you very soon. |
| **Student A:** | Some new friends? |
| **Student B:** | Where are they? |
| **Student C:** | Where are our new friends Miss Wong? |
| **Miss Wong:** | Don’t be so anxious. You will know soon enough.Alright before I introduce the new friends to you,I want to ask all of you a question.Where is the place that you usually spend most of your time? |
| **Student A:** | My home. |
| **Student B:** | At school. |
| **Student C:** | At the library. |
| **Miss Wong** | Alright. It’s very common for people who are city dwellers like usto spend over 70% of our time indoors.Examples of indoor environments are our home, our school, the library,and the office where we work.So this means that the indoor air quality is very important to us.If the indoor air quality’ s bad, it will directly affect our health.In order to help us understand more about indoor air quality importance,I have brought along 3 new friends to introduce to you.They are the IAQ Elves. |
| **IAQ Elves** | Hello there are new found friends. How are you doing today? |
| **All Students:** | Wow the IAQ Elves we are great. |
| **Miss Wong:** | Alright children.Let’s listen to what the IAQ Elves have to tell us about indoor air quality. |
| **IAQ Elves:** | Hello school children. We hope you’re all doing well. We’re the IAQ Elves. |
| **“I” Elves:** | Firstly, let us introduce ourselves to you. I am “I”. |
| **“A” Elves:** | And I am called “A”. |
| **“Q” Elves:** | You guys can call me “Q”. |
| **“I” Elves:** | So I.A.Q. stands for “Indoor Air Quality”What that mean is, the quality of the air that we breathe whenwe are indoors. |
| **“A” Elves:** | Today we have an exciting day planned for you kids.We’re going to bring you to all kinds of different placesto experience how indoor air quality can affect our daily life in many different waysWe’ll find out the source of air pollutantsthus effectively preventand reduce the impacts of these pollutants on usespecially when it comes to the air that is indoors. |
| **“Q” Elves:** | First of all, we are going to bring you to a certain placewhere many of us spend most of our time.A, can you guess where that happens to be? Come on, take a guess. |
| **“A” Elves:** | Well. If you let me make a guess. The place where we spend most of our time during the day in.Hey I’ve got it! It’s our home. Isn’t that right? |
| **“Q” Elves:** | Yes. That’s right you’re brilliant A!The place where we spend most of our time in everyday is our home. |
| **Mother:** | Hey, stop it! Don’t scratch. Go and wash your hands quickly |
| **Children:** | Sure. |
| **Mother:** | Make surer you wash your arms as well.Well? Daddy hey. It’d been raining lately,Don’t forget to clean the carpet. |
| **Father:** | I’ve got it honey.Move your feet please Man, so I can vacuum the carpet. |
| **Mother:** | Here. |
| **Children:** | Daddy Is the carpet dirty? |
| **Father:** | Of course it’s dirty. |
| **Children:** | How come I don’t see it? |
| **Father:** | Well young man,Of course you can’t see it with your naked eyes.Come on! Dad will give you a magical magnifier. |
| **Children:** | Eew It really is dirty. What are those things? |
| **Father:** | Those are the biological contaminants that hide unseen all through the house. |
| **Children:** | What are biological contaminants? |
| **Father:** | Well son. Biological contaminants include bacteria, fungi, viruses and those dust mites.These contaminants come in many different sources as well.They can be spread by the debris of people, animals, soil and even such things as plants.For example, the dust mite grows in a very particular environment,must be warm and humid for it to exist and breed.In furniture like mattresses, bed sheets and pillowcases as well.For instance it’s been raining the past few days right.The indoor environment became very humid,that’s the ideal breeding ground that these biological contaminants need. |
| **Mother:** | Oh. Definitely. Your daddy is right.Actually apart from the carpet we should also pay attention to other places in our home,such as the walls and all the furnitureMould and dust mites have the ability to grow on them just as WellAll these contaminants may trigger allergic reactions in us,Including coughing, sneezing and a runny nose.In fact your itchiness just nowMay be skin irritation triggered by these biological contaminants.Therefore we should clean our home constantly,Make sure the premises is clean and hygienic,to reduce the impacts of the biological contaminants. |
| **Children:** | I understand. We’ll have to sweep and vacuum the floor mare often. |
| **Mother:** | Um. |
| **Father:** | Actually son just cleaning the household often is not enough.The most important is maintaining good air quality.That’s why indoor ventilation is needed.For example, we have to install exhaust fans to discharge indoor air especially in oily and wet places.Also, we should clean the filter of our air-conditioner regularlyTo prevent the dust from accumulating on it.If you find mould on the walls or furnitureYou should deal with it immediately.When necessary, we can even clean our home with a diluted bleach solutionthat will prevent the accumulation of these biological contaminants. |
| **Mother:** | Aside from this, if we find construction problems in our homeSuch as cracks on the walls or water leakage, we should fix them.Humid places provide a perfect breeding bed for bacteria and mould.Daddy, you know what to do now. |
| **Father:** | Oh Yes madam! Right away! |
| **Mother:** | Well Man do you understand all that? |
| **Children:** | I’ve got it. |
| **Mother:** | So then you should also know what to do now as well. |
| **Children:** | I’ll help clean up the house too. |
| **IAQ Elves:** | Hello, everyone. Here we are again. |
| **“A” Elves:** | Has the scenario we have just watched ever happened in your home before?Did you listen to what the dad and mom in the story saidand do you understand what they all mean? |
| **“Q” Elves:** | That’s great, you understand.Next we are going to give you more information.Let’s listen to what “I” is going to share with everyone right now. |
| **“I” Elves:** | Home is the place where all of us stay most often.Apart from when we’re at school or at the office,We spend the majority of our time, inside of our own homes with our families.Naturally, we all want to have air that is fresh and healthy while we are inside our home.Therefore, good quality air is important to everyone in the entire household.Especially to those family members who might be weaker and more susceptible to illness.Those are people such as the elderly, and small children,and pregnant women. If the indoor air quality is poor,these kinds of people may get sick quite easily. |
| **“A” Elves:** | Alright children. Next we’re going to bring you to another familiar Place where you spend quite a lot of your time during the day.Can any of you children guess where the place is?That’s right. It’s the school that you go to every day to learn. |
| **Miss Chan:** | Alright everyone in class, can you categorize these for us?Alright. Would you please come up to the board?Please stand up class. Goodbye class. |
| **Students:** | Goodbye Miss Chan. |
| **Miss Chan:** | Miss Leung. |
| **Miss Leung:** | Miss Chan. Just finished your lessons? |
| **Miss Chan:** | That’s right. Do you have any more today? |
| **Miss Leung:** | No but my students have an extra-curricular activity after school.And I’ll be their instructor for it. Oh that’s right! Time really flies.You’ve already been with us for about 1 month now.How do you feel? Are you used to it? |
| **Miss Chan:** | I feel really wonderful. Everything is terrific, the facilities, the supporting facilities and of course all the people are great.I especially like the environment. |
| **Miss Leung:** | Environment? |
| **Miss Chan:** | Oh yes, I really appreciate the environment.Not only do we have a nice outdoor environment, lots of fresh air,but there’s also a perfect indoor environment as well. And seriously, the indoor air quality is incredibly good. That’s great. |
| **Miss Leung:** | Oh I understand. You meant the indoor environment.That’s right, our principal is devoted to creating a good school environment.Especially the indoor air quality of every single classroom.School is a place for group life together after all.We need to have good air qualityso as to provide a comfortable environment that helps our students learn. |
| **Miss Chan:** | That’s right. I noticed our school avoid using blackboards and chalk as much as possible.This is to reduce the particles and dust that are released from chalk and erasers.These particles may irritate our air passages, do things like cause itchiness and discomfort in our throat.It can even trigger coughing and sometimes a sore throat.Even worse it may bring on an asthma attack.So that’s why the teachers use whiteboards and environmentally-friendly whiteboard markers.It’s to prevent the inhalation of chalk’s dust by the teachers.The students in the front rows also benefit. |
| **Miss Leung:** | That’s right. Normally if possibleI ask my students to open the windows or turn on the ventilation fansto ensure sufficient ventilation in the classroom.As there are so many students in a classroom,if the air ventilation is poor, students will feel begin to feel uncomfortable, tired, and even dizzy. Moreover if the classroom is filled with contaminants such as dust and bacteria,students may begin to suffer from respiratory diseases. |
| **Miss Chan:** | That’s right. I also should pay more attention to the air quality of the classroom.If the classroom air quality is good, students will be more vigorous and more attentive.They’ll be more involved in the lessons too.No wonder the kids in your class are so smart, all thanks to you. |
| **Miss Leung:** | Oh thanks! Oh it’s time for my activities now.Miss Chan I’ll catch up with you again. |
| **Miss Chan:** | Great! See you later, bye. |
| **Miss Leung:** | Goodbye. |
| **Miss Wong:** | What are you kids doing? |
| **Student A:** | We’re appreciating the high quality of the indoor air. |
| **Student B:** | It’s very fresh! |
| **Student C:** | We can’t take all this fresh air for granted!It takes so much to enjoy fresh air. |
| **Miss Wong:** | That’s right. I’ll show you one more example for you to study.Listen to this children, do you ever go to shopping malls for dinner or for shopping around? |
| **Student A:** | I go to a restaurant in a shopping mall to have some tea. |
| **Student C:** | I did too. My favourite snack shop is inside a shopping mall. |
| **Student B:** | I always go shopping with my parents inside malls on Saturday. |
| **Miss Wong:** | Alright now we know you all love visiting shopping malls.But have you ever paid attentionto what the air quality of the shopping mall is like?Alright, let’s see what Q has to say about it. |
| **“Q” Elves:** | Thank you very much Ms Wong! Okay children,let’s visit with some other friends, and see what their shopping mall experience is like.Indoor air quality is important there as well.Are you ready everybody? Well then let’s go there! |
| **Friends:** | Hey! |
| **Friend A:** | Hey Hoi, you’ ll start your running training next week won’t you?Have you bought all the equipment you need? |
| **Hoi:** | I’ve been shopping for a long time, I’ve bought almost everything.Hey, have you bought what you need for your Art lessons yet? |
| **Yan:** | Not yet, I have to go to a stationery shopFor drawing pads and paints. But I’m a bit tired from shopping for so long.Hey you guys want to get something to eat? |
| **Friends:** | Good idea. |
| **Yan:** | Come with me. |
| **Waitress:** | Please come in. How many please? |
| **Hoi:** | Three please. |
| **Waitress:** | This way please. |
| **Hoi:** | Thank you. |
| **Waitress:** | May I take your orders please? |
| **Yan:** | I’ ll have a sandwich combo please.  |
| **Waitress:** | Okay. |
| **Hoi:** | A cup of coffee please. |
| **Waitress:** | Okay. |
| **Friend A:** | Hot milk tea for me. |
| **Waitress:** | Alright. It won’t be long. |
| **Hoi:** | Oh! Excuse me, can I use this shopping mall coupon today? |
| **Waitress:** | Yes, you certainly can. You’ll enjoy a discount from your bill when you pay it later. |
| **Hoi:** | So Yan, have you bought all tools you need for lessons yet? |
| **Yan:** | Not yet. I tried to buy the supplies in one go at the shop I visited.But I wasn’t able to get all I wanted there. |
| **Hoi:** | Then eat your fill now.We’ll be walking a lot.Don’t worry I have this coupon, we can order more if we want. |
| **Yan:** | Um. |
| **Friend A:** | Where did you get such a great coupon?Do you go shopping here a lot? |
| **Hoi:** | Well I responded to the mall manager’s questionnaire the last time I was here.About the indoor air quality of the shopping.I return for my comments they gave me this great coupon to use anywhere at the shopping mall. |
| **Friend A:** | Just for indoor air quality? |
| **Hoi:** | That’s right, and did you noticedThis shopping mall has air conditioning system?So managing the air quality is the utmost importance to them.Lots of people come hereSo the carbon dioxide emitted by humans will accumulate, then the air quality will become poor, causes us discomfort and fatigue. |
| **Yan:** | I think the air quality here is quite good.I wonder if the shopping mall spent a lot of effort in achieving this? |
| **Hoi:** | I visit this shopping mall a lot.I found its indoor air quality is really good.It has a good ventilation systemand the air conditioning system is operating properly.Also maintenance and inspections are done regularly.Plus the shopping mall has done a great jobIn cleanliness,Controlling contaminants.So for example the carpet’s vacuumed often, the floors are CleanedAnd the air filters are cleaned regularly.I’ve never found any dripping air ducts, or mould spots on the ceilings.Besides, on the wet daysThe shopping mall will supplement ventilation systems with fansAnd dehumidifiers to ensure the cleanliness and stop bacteria and mould from growing. |
| **Yan:** | You know I’ve noticed that too. |
| **Waitress:** | Here’s your sandwich combo and coffee. |
| **Friend A:** | Since you’re talking about indoor air quality.That reminds me of the law set up by the governmentTo expand the no smoking areas all over Hong KongSmoking is now prohibited in all indoor public areas, such as shopping malls andrestaurants just like this café, Now when we go out to eat,it’s a second-hand smoke free environment, the air is much fresher in here |
| **Hoi:** | You’re sure right about that. Actually second-hand smoke is a big air pollutant.Nicotine and a combination of other chemicals are released when tobacco is being burned.These substances will irritate our eyes and respiratory system BadlyThey will cause headaches, coughing, and prolonged exposure to these substances,will put us at a greater risk of lung cancer even from second-hand smoke.So the banning of smoking indoorsActually make the air we breathe indoors much fresher. |
| **Yan:** | Wow! To maintain good indoor air qualityIs no easy task! I had no idea what was involved.We can shop comfortably in a shopping mall if the indoor air quality is good.Hey by the way, did they only give you one coupon? |
| **Hoi:** | Well actually I do have a few of them.My family did the questionnaire too and they give me all the coupons. |
| **Yan:** | Why didn’t you take out all the coupons when we were shopping just now? |
| **Friend A:** | Hey! Never mind! Let’s go shopping again after we eat |
| **Friend:** | Good Idea. |
| **Miss Wong:** | Alright class. So up to this point in our discussion,you’ ve learned more about the importance of indoor air quality, haven’t you?Alright. Let’s have a little quiz.Do you remember what Indoor Air Quality is for short? |
| **Student A:** | Oh Yes! It’s “I” |
| **Student B:** | A |
| **Student C:** | Q! |
| **Miss Wong:** | I.A.Q. Indoor Air Quality.Please remember it. You should always keep this in mind. |
| **Students:** | We know! |
| **VO:** | If you want to know more about indoor air quality, You may contact us through the following ways. |
|  |  |
|  |  |
|  |  |
|  |  |